DOCUMENT RESUME

ED 049 102 SO 000 851

TITLE	United States Arms Control and Disarmament Agency. Ninth Annual Report to Congress.
INSTITUTION	Arms Control and Disarmament Agency, Washington, D.C.
REPORT NO	PUB-54
PUB DATE	31 Dec 69
NOTE	67p.
AVAILABLE FROM	Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 ($.35)
EDRS PRICE	EDRS Price MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	Agencies, Annual Reports, Armed Forces, Federal Government, *Foreign Policy, Foreign Relations, Government Publications, *National Defense, *Nuclear Warfare, *Political Science, World Affairs, *World Problems
IDENTIFIERS	*Arms Control, Disarmament, Peace, SALT, Strategic Arms Limitation Talks

ABSTRACT

This annual report surveys activities of the Arms Control and Disarmament Agency (ACDA) and summarizes disarmament developments for the calendar year 1968. An act of Congress states that ACDA must have such a position within the Government that it can provide the President, the Secretary of State, other officials of the executive branch, and the Congress with recommendations concerning United States arms control and disarmament policy, and can assess the effect of these recommendations upon our foreign policies, our national security policies, and our economy. Major subjects of the report are: 1) Strategic Arms Limitations Talks (SALT); 2) Nuclear Arms Control Proposals; 3) Chemical and Biological Weapons Control; 4) Arms Control Measure for the Seabed; 5) Nonproliferation of Nuclear Weapons; 6) Conventional Arms and Military Expenditures; 7) Mutual and Balanced Force Reductions in Central Europe; 8) General Advisory Committee; and, 9) Agency Operations. ACDA policy, research activities, interagency relationship, status of the Social Science Advisory Board, and public information services are discussed. It is noted that a questionnaire was sent to institutions of higher learning as a result of increasing academic interest in courses related to arms control and disarmament. Appendices to the report include texts of Presidential messages, policy addresses, treaty drafts, Geneva Protocol of 1925, as well as lists of ACDA Depository libraries, members of the Social Science Advisory Board, and officials of the Agency. (Author/JSB)

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9th Annual Report to Congress

THE UNITED STATES
ARMS CONTROL AND DISARMAMENT AGENCY

January 1, 1969 - December 31, 1969

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9th Annual Report to Congress

THE UNITED STATES
ARMS CONTROL AND DISARMAMENT AGENCY

January 1, 1969 - December 31, 1969

LETTERS OF TRANSMITTAL

To the Congress of the United States

It is with a sense of gratification that I transmit to the Congress the Ninth Annual Report of the U.S. Arms Control and Disarmament Agency.

The events of the past year have shown that through negotiation we can move toward the control of armaments in a manner that will bring a greater measure of security than we can obtain from arms alone.

There is reason to be hopeful of the possibility that an understanding can be reached with the Soviet Union which will permit both nations to reduce the burden and danger of competitive development of strategic arms.

The process has begun. The preliminary, exploratory phase of the Strategic Arms Limitation Talks was held in Helsinki in November and December. Ambassador Gerard Smith, the Director of the Arms Control and Disarmament Agency, whom I named to head our delegation to the Talks, reported to me that the exchange of views was serious and augured well for the next phase to begin in Vienna in April.

We have undertaken these negotiations because it is in our interest to do so. We believe the Soviet Union recognizes a similar interest. In addition, continuing technological advances in weapons systems give warning that delay will only complicate the arduous task of achieving agreements.

The other nations of the world are looking to the United States and the Soviet Union to limit and reduce our strategic arsenals. I believe that a verifiable agreement which will limit arms on both sides will in fact enhance mutual security.

The report which I now send to you describes the contribution of the Arms Control and Disarmament Agency to the preparation for and the conduct of negotiations on strategic arms limitation. The report also describes efforts in pursuit of other arms control measures directed to controlling chemical warfare and bacteriological research, to bringing the nonproliferation treaty into effect and to banning nuclear weapons and other weapons of mass destruction from the seabed.

In transmitting this report, I reaffirm my Administration's concern with the substance rather than the rhetoric of arms control. Wherever possible, consistent with our national security, I want our talents, our energies and our wealth to be dedicated, not to destruction, but to improving the quality of life for all our people.

Richard Nixon

THE WHITE HOUSE,

February, 1970

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY
WASHINGTON

OFFICE OF
THE DIRECTOR

January 20, 1970

Mr. President:

I submit herewith to you for transmittal to the Congress, as required by the Arms Control and Disarmament Act, the ninth annual report concerning the activities of the U. S. Arms Control and Disarmament Agency.

This report covers the period from January 1, 1969 to the end of the calendar year. The Agency has arranged for it to be printed by the Government Printing Office.

Respectfully,

Gerard Smith

The President,
The White House.

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President Nixon addressing the
United Nations General Assembly

INTRODUCTION

PRESIDENT NIXON TOLD THE AMERICAN PEOPLE IN HIS INAUGURAL ADDRESS, "After a period of confrontation, we are entering an era of negotiation."

The U.S. Arms Control and Disarmament Agency (ACDA), in its activities during 1969, has played its part in seeking to implement this policy by seeking alternatives to arms competition in the pursuit of national security.

The President stated at the time of his appointment of Gerard C. Smith as Director, on January 29, "The tasks of the Arms Control and Disarmament Agency belong to the most important of my Administration. . . . I am directing that the role and status of the Arms Control and Disarmament Agency within the U.S. Government be upgraded. Mr. Smith will have direct and ready access to the Secretary of State and to the President and will participate in all meetings of the National Security Council at which matters within the scope of his mission are considered."

The year 1969 brought progress in a number of areas of endeavor in the arms control field.

The United States and the Soviet Union began the Strategic Arms Limitation Talks (SALT) with a preliminary phase in Helsinki from November 17 to December 22. ACDA's Director Smith was named to lead what President Nixon termed "one of the most momentous negotiations ever entrusted to an American delegation." [1] During this preliminary phase, a work program was drawn up as the basis for the substantive negotiations to follow, and agreement was reached that the talks would resume in Vienna on April 16, 1970.

The Conference of the Committee on Disarmament (CCD) replaced the Eighteen-Nation Committee on Disarmament (ENDC), meeting in Geneva. The membership was expanded to 26 nations in order to make it more representative of the world today while maintaining its effectiveness as a relatively small negotiating body which serves as the world's principal forum for multilateral arms control negotiations.[2] The Agency

[1] See Appendix I, p. 37.

[2] The Committee, which meets at the Palais des Nations in Geneva, will enter its ninth year on Feb. 17, 1970. It was established under a joint U.S.–U.S.S.R. agreement and welcomed by the General Assembly. While it is not a U.N. body, it reports to the General Assembly and the Disarmament Commission and is serviced by the U.N. Secretariat. Membership is now made up of 6 NATO nations—Canada, France, Italy, Netherlands, United Kingdom, and United States (France has never taken her seat at the conference table)—and Japan; 6 from the Warsaw Pact—Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and U.S.S.R.—and Mongolia; and 12 nonaligned nations—Argentina, Brazil, Burma, Ethiopia, India, Mexico, Morocco, Nigeria, Pakistan, Sweden, United Arab Republic, and Yugoslavia.

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participated in ENDC and CCD discussions from March 18 to May 22 and from July 3 to October 30. The U.S. delegation was headed at various times by the Director of ACDA, the Deputy Director, and the Assistant Director for International Relations. In addition, the Director and the Assistant Director for International Relations were members of the U.S. delegation to the twenty-fourth U.N. General Assembly, which met from September 16 to December 17.

The United States and the Soviet Union, as Co-Chairmen of the Conference of the Committee on Disarmament, tabled a joint draft treaty banning nuclear weapons and other weapons of mass destruction from the seabed. After some revision in response to the views of other members of the Committee, the treaty draft was annexed to the report of the CCD to the U.N. General Assembly. It was the subject of debate in the General Assembly and was then remanded to the CCD for further consideration.

Substantive discussions took place at the Geneva Conference and in the General Assembly on arms control measures related to chemical and biological weapons. President Nixon gave great impetus to these efforts when on November 25 he announced significant U.S. policy decisions relating to chemical and biological agents and warfare.

Progress was made in Geneva in developing an international exchange of seismic data, which can be useful in the effort to reach an agreement to ban all nuclear weapons tests, including those conducted underground.

The United States and the Soviet Union concurrently signed their instruments of ratification of the Treaty on the Nonproliferation of Nuclear Weapons. A total of 93 nations have now signed the treaty and 25 have deposited their instruments of ratification. The treaty will enter into force when the 3 depositary governments (the United States, the United Kingdom, and the Soviet Union) and 40 other nations have deposited their instruments of ratification. It is anticipated this number will be reached early in 1970.

Before multilateral or bilateral negotiations on an arms control measure are begun, exhaustive work must be done to insure that the security interests of the United States, both immediate and long-range, are fully protected, and that necessary consultations with our allies have been undertaken.

The formulation of U.S. policy on arms control is the result of extensive coordination and consultation within the Government. ACDA has maintained day-to-day contact with the Departments of State and Defense, the Joint Chiefs of Staff, the Central Intelligence Agency, the Atomic Energy Commission, and other executive departments and agencies engaged in national security affairs.

The primary device for the review and coordination of such recommendations is the National Security Council. Upon taking office, President Nixon revitalized the NSC as the organization responsible for consideration of policy issues requiring Presidential determination. The Director of ACDA participated in ten sessions of the NSC on relevant national security questions.

ACDA has planned and managed an integrated research program in support of its recommendations and its conduct of international negotiations. The research has been carried out by internal staff analysis supported by outside contractors. The field of inquiry ranged from the complex technology of strategic missile systems, to political and social science factors bearing on arms control issues.

This report describes the efforts that have been made in the past year by the U.S. Arms Control and Disarmament Agency toward solving some of the major problems which stand as obstacles to world security.

STRATEGIC ARMS LIMITATION TALKS

Where national security interests may have operated in the past to stimulate the strategic arms race, those same national security interests may now operate to stop or slow down the race. The question to be faced in the strategic arms talks is whether societies with the advanced intellect to develop these awesome weapons of mass destruction have the combined wisdom to control and curtail them.[1]

THE PRELIMINARY PHASE OF THE STRATEGIC ARMS LIMITATION TALKS (SALT) was held in Helsinki from November 17 to December 22. The communique issued by the American and Soviet delegations at the conclusion characterized the exchange of views as "useful to both sides." The preliminary phase was exploratory in nature—a serious effort by both sides to find common ground toward increasing mutual security through curbs on strategic arms. The communique reported that as a result of the exchange, "each side is able better to understand the views of the other with respect to the problems under consideration. An understanding was reached on the general range of questions which will be the subject of further United States–Soviet exchanges." [2]

The stage was thus set for the main negotiations, which are scheduled to begin in Vienna on April 16, 1970.

In his message to Ambassador Gerard Smith on the occasion of the opening of the talks in Helsinki on November 17, President Nixon said: ". . . for our part we will be guided by the concept of maintaining 'sufficiency' in the forces required to protect ourselves and our allies. I recognize that the leaders of the Soviet Union bear similar defense responsibilities." And he instructed Ambassador Smith and the American delegation to approach the negotiations "recognizing the legitimate security interests on each side."

Secretary of State Rogers said on November 13, "Previous disparity in nuclear strength has been succeeded by the situation of sufficiency . . . and, because this condition will continue for the foreseeable future, the time seems to be propitious for considering how to curb the race in which neither side in all likelihood can gain meaningful advantage."

In recent years it has become increasingly apparent that competitive accumulation of weapons will not guarantee the basic security of either side, because any attempt to seek

[1] Secretary of State Rogers, Nov. 13, 1969. See Appendix II, p. 39 for full text of address.

[2] See Appendix III, p. 44.

strategic advantage will be met by countermeasures to preserve a retaliatory capability. This mutual capability for assured destruction, therefore, provides a basis for a mutual limitation of strategic weapons.

"There is one thing stronger than all the armies in the world and that is an idea whose time has come." This quotation—attributed to Victor Hugo—might thus be applied to the agreement finally reached by the United States and the Soviet Union to hold strategic arms limitation talks.

A little over 2 years after the United States called on the Soviet Union to explore the possibility of an agreement, Soviet Foreign Minister Gromyko said in a speech to the Supreme Soviet on June 27, 1968, "One of the unexplored regions of disarmament is the search for an understanding on mutual restriction and subsequent reduction of strategic vehicles for the delivery of nuclear weapons—offensive and defensive—including anti-missile. The Soviet Government is ready for an exchange of opinion on this question."

Unfortunately, the worldwide expectation that at last discussions could begin to find a way out of the nuclear arms competition proved premature. Even as arrangements were being made on a time and place for the talks, Czechoslovakia was invaded by Warsaw Pact troops, and the moment of opportunity dissolved.

When the new U.S. President was sworn in on January 20, the Soviet Foreign Ministry took that occasion once again to express willingness to enter into discussions. President Nixon promptly voiced his support for the strategic talks, while pointing out that their timing and context also were important.

At the same time, President Nixon made it clear that it was the objective of his new Administration to be sure that the United States has sufficient military power to defend its interests and to maintain its commitments around the world. In this connection, he discussed the semantics of the U.S. strategic nuclear posture and observed in the context of today's weaponry "sufficiency" is a more appropriate term than either "superiority" or "parity."

Though the work which had been done by the previous Administration prior to January 1969 was extremely useful, the President asked for a detailed study before engaging in the talks. In addition to an overall review of military requirements, the National Security Council established an interagency steering committee to study the issue of strategic arms control. This committee was headed by ACDA's Director Gerard Smith, and included high-level representatives of the Departments of State and Defense, the Joint Chiefs of Staff, the CIA, the Atomic Energy Commission, and the National Security Council staff. The group was instructed to study the strategic, political, and verification aspects of arms control options. Its task included developing a range of options for limiting strategic arms, and evaluating the implications of each.

The steering committee was supported by a number of panels which worked on detailed technical and strategic analyses of specific aspects of the problem using modern computer techniques where required. Thus the steering committee's report was the result of the efforts of many experts in strategic planning, foreign policy and arms control from all the Federal agencies sharing in the responsibility for national security.

A Verification Panel was also established under the chairmanship of Dr. Henry Kissinger for the purpose of evaluating the many complex verification problems associated with strategic arms control. The Director of ACDA; the Under Secretary of State; the Deputy Secretary of Defense; the Attorney General; the Deputy Di-

rector of CIA; and the Assistant to the Chairman, the Joint Chiefs of Staff for Strategic Arms Negotiations serve as members.

The primary aims of the preparatory work were to define the effects of specific constraints on specific weapons systems, and the verification measures necessary for each possible agreement in order to insure confidence that national security interests are protected.

On June 19 President Nixon announced at a news conference that the National Security Council was completing the preparations for the strategic talks. Consultation with allied nations was expected to continue through the balance of June and through July. The President said, "We have set July 31 as a target date for the beginning of the talks, and Secretary Rogers has so informed the Soviet Ambassador."

In early July the President announced that the U.S. delegation to SALT would be headed by ACDA Director Smith, with (then) Deputy Assistant Secretary of State Farley as alternate U.S. representative. Ambassador Philip J. Farley was subsequently appointed Deputy Director of ACDA and retains his role as alternate U.S. representative to SALT in that position. In addition to these ACDA officials, the delegation list included: former Deputy Secretary of Defense Paul Nitze; Ambassador Llewellyn Thompson; former Secretary of the Air Force Harold Brown; and Lt. Gen. Royal B. Allison, USAF.

Although Foreign Minister Gromyko had reiterated Soviet interest in SALT in a speech to the Supreme Soviet in July, official word from the Soviets as to a time and place for the talks was not received until late October.

On October 25 the White House announced that the Strategic Arms Limitation Talks would begin in Helsinki on November 17, "for preliminary discussion of the questions involved." A similar announcement was made in Moscow. Secretary Rogers held a news conference later the same day to elaborate on the Government's approach to and expectations for the talks. He explained that they would be preliminary in nature and devoted to exploring what subjects should be covered in the main negotiations to follow. Although predicting that success in the talks could result in improved relations with the Soviet Union which might have a beneficial effect on other problem areas in international relations, the Secretary made clear that no preconditions had been laid down for the conduct of the talks.

The Under Secretaries Committee of the National Security Council was charged with providing continuing guidance for the U.S. negotiating team. This Committee, in turn, established a Backstopping Committee, chaired by the Deputy Director of ACDA, to provide day-to-day support to the delegation in Helsinki.

The bilateral meetings began in an atmosphere characterized as both cordial and serious. The public opening statements made by Ambassador Smith and by Ambassador Vladimir S. Semenov, the head of the Soviet delegation, reflected the businesslike approach of both sides to the task ahead.

The Arms Control and Disarmament Agency's contribution to the preparations for the talks and to the conduct of the discussions themselves was greatly facilitated by the existence of the extensive data base which had been built from its continuing research program. To supplement and support its internal research and analytical capabilities, the Agency has external contracts directed to the technical aspects of the arms control implications of both defensive and offensive strategic weapons. The Agency also draws on the research

capabilities of other Government agencies to insure that all pertinent information is brought to bear on SALT considerations. The purpose of this research is to gain detailed understanding of the nature and implications of strategic weapons systems and of methods of verifying compliance with various strategic arms restrictions under consideration.

Potential arms control agreements which limit the deployment and/or testing of strategic weapons systems may necessitate inspection systems capable of detecting a change in the characteristics of launch vehicles, both offensive and defensive, and, in the case of submarine launched ballistic missiles (SLBMs), the submarines used to deploy them. ACDA is currently pursuing research programs to develop inspection systems capable of detecting upgraded offensive missile performance characteristics, the upgrading of ballistic missile submarines, upgrading surface-to-air missiles to give them an ABM capability, and the detection of the presence of nuclear weapons.

A study which will evaluate the capability of manned and unmanned sensors at a missile test range to determine whether or not performance characteristics of offensive strategic missiles have been upgraded is currently in the planning phase.

Research and analysis of the complex factors involved is continuing as the United States prepares for the substantive phase of SALT scheduled to begin April 16. In cooperation with other departments and agencies, ACDA will continue to play a leading role in the conduct of the talks and in the supporting activities necessary to the negotiations.

Ambassador Gerard Smith (right), head of the U.S. delegation to SALT, prepares to confer with the head of the Soviet delegation, Ambassador Vladimir S. Semenov (second from right). Behind the two negotiators are two members of the U.S. delegation, former Deputy Secretary of Defense Paul Nitze (left) and Lt. Gen. Royal B. Allison, USAF.

NUCLEAR ARMS CONTROL PROPOSALS

. . . the United States supports the conclusion of a comprehensive test ban adequately verified.

. . . the United States delegation will continue to press for an agreement to cut off the production of fissionable materials for weapons purposes and to transfer such materials to peaceful purposes.[1]

Comprehensive Test Ban

SINCE THE LIMITED TEST BAN CAME INTO FORCE IN 1963, the Eighteen-Nation Committee on Disarmament (ENDC) has pursued a comprehensive ban on nuclear weapons tests as a logical and necessary further restriction on nuclear arms. The Committee has as a mandate the U.N. General Assembly resolution adopted in 1963 "to continue with a sense of urgency" negotiations for a treaty suspending nuclear and thermonuclear tests.

The debate during the 1969 sessions of the Geneva Conference showed that the discussions which have taken place in the intervening years in the ENDC, the General Assembly, and international scientific meetings have resulted in an increased appreciation of the necessity for procedures to insure that a comprehensive ban was being respected.

In his messages to the ENDC in March and in July, President Nixon repeated U.S. support for an adequately verified comprehensive test ban, and called for greater understanding of the verification issue, since differences regarding this question have thwarted achievement of this key arms control measure.

On April 1 the Swedish representative to the Conference introduced a working paper containing a draft treaty banning underground nuclear weapons tests. She cited the 1968 report of the Stockholm International Institute for Peace and Conflict Research (SIPRI) in contending that the existing international seismic network could differentiate between earthquakes and nuclear explosions down to very low yields. The Swedish draft put forth the premise that additional powerful seismic array stations soon to come into service, along with the establishment of a workable seismic data exchange system, would improve control capabilities to the point that on-site inspection would not be necessary.

The U.S. representative, Ambassador Adrian Fisher, responded to the Swedish proposal. The SIPRI report

[1] President Nixon's Letter to Ambassador Gerard C. Smith, on the Opening of the Conference of the Eighteen-Nation Disarmament Committee, Mar. 18, 1969. The Committee was redesignated the Conference of the Committee on Disarmament (CCD) on Aug. 26, 1969.

had found, he told the Conference, that a "clear separation between earthquakes and nuclear explosions could not be made by teleseismic means for underground nuclear test explosions up to tens of kilotons of explosive yield." He pointed out that nuclear explosions in this range could have significant military value and could not be ignored in negotiating an acceptable treaty.

The Soviet Union endorsed the proposal for an international exchange of seismic data in the context of a comprehensive test ban but would not accept international inspection on its territory nor permit evaluation of data by an international agency.

As a further and important contribution to the effort to increase understanding of seismic events, Ambassador Fisher submitted a working paper to the ENDC, describing the implementation of the U.S. seismic investigation proposal. This idea was first advanced in the United Nations in December 1968, by Ambassador William C. Foster, who was at that time Director of the Arms Control and Disarmament Agency and a member of the U.S. delegation to the General Assembly. The proposal offered to use nuclear explosions, to be conducted by the United States as a part of its research into peaceful applications of nuclear energy, for the collateral objective of worldwide seismic investigation. The working paper gave a description of the first explosion, code-named Project RULISON, to be used in implementing the U.S. proposal, and furnished technical facts, such as precise site, depth of the explosion, general geology in the vicinity, and other data which would be pertinent to seismic measurements.

Several weeks before the actual detonation, which occurred on September 10, the U.S. Coast and Geodetic Survey alerted seismic stations worldwide. The event proved to be particularly interesting seismically and was well recorded. The U.S. Coast and Geodetic Survey, under an agreement with ACDA, is assembling data collected from within and outside the United States and will prepare a report on its computations. The report will include an analysis of the data using seismic identification criteria for distinguishing between explosions and earthquakes. Other interested nations will thus have the opportunity to compare these findings with their own analyses and to discuss both in relevant forums.

ACDA is also making use of the Project RULISON nuclear explosion for continuing its research in several techniques which might be used by on-site inspectors under a comprehensive test ban. A field test is being carried out to measure the surface effects produced by the explosion which might assist on-site inspectors in finding and identifying the site of the explosion. Measurements are also being made, and will continue over the next several months, to determine if any radioactive gases are detectable at the surface. This field test will further investigate the usefulness of radioactive-gas sampling as a technique for on-site inspection.

Cutoff of Fissionable Materials Production

The United States has proposed a verified cutoff of fissionable-materials production for use in weapons, to be accompanied by the transfer of agreed quantities of weapons-stockpile fissionable materials to peaceful purposes. In 1965 this offer was expanded to provide that the materials for transfer be obtained by the demonstrated destruction of "thousands" of nuclear weapons.

In his letter to Ambassador Gerard Smith on the opening of the Geneva Conference, March 18, 1969, President Nixon said that the United

States will continue to press for such an agreement.

In April Ambassador Fisher offered a new element in the U.S. proposal: In order to provide for compliance with the agreement, the International Atomic Energy Agency (IAEA) would be asked to safeguard the nuclear material in each nation's peaceful nuclear activities and to verify the continued shutdown of any facilities for production of fissionable material that are closed.

This change was an attempt to solve the verification problems which had previously impeded prospects for agreement. The earlier U.S. proposal had suggested adversary inspection arrangements, which had met with refusal by the Soviet Union. The introduction of the IAEA's safeguards system as the means for insuring against diversion of peaceful nuclear materials to weapons use follows the approach to the verification problem which was adopted in article III of the Nonproliferation Treaty.

Ambassador Fisher emphasized to the Committee two aspects of the cutoff proposal that are particularly relevant to recent arms control developments. First he stressed the value of the cutoff measure as a means of halting the nuclear arms race. Fissionable material is the essential ingredient for a nuclear bomb, and limitation on production of fissionable material is one way to prevent the growth of stockpiles of nuclear weapons. American efforts to reach such an agreement go back to 1956, when President Eisenhower first proposed a mutual cutoff—a time when stockpiles of nuclear bombs were much smaller than they are now. The present nuclear confrontation would be at a much lower level had that initial effort been successful.

The second consideration is the importance of this measure as a prudent and necessary step toward establishing an equitable system of safeguards on all production of fissionable materials. Ambassador Fisher told the Committee that the United States believes "the nuclear-weapon Powers should be prepared to accept, in the context of a cutoff agreement, the same safeguards on their fissionable material production facilities as are appropriate to verify nuclear nonproliferation in the nonnuclear-weapon States."

The proposal was well received by the nonaligned members and by the United Kingdom, Canada, and Japan. A number of delegates made the point that a cutoff in the production of fissionable materials for weapons purposes by the nuclear powers would balance the restriction accepted by the nonnuclear-weapon nations in signing the Nonproliferation Treaty. The Swedish representative characterized a cutoff agreement, a comprehensive test ban, and the Nonproliferation Treaty as "parts of one and the same parcel, as they would assure qualitative and quantitative freezes on nuclear weapons development."

The Soviet Union again rejected the U.S. cutoff proposal, repeating its claim that the United States was motivated by an "over-production" of nuclear materials for military purposes.

CHEMICAL AND BIOLOGICAL WEAPONS CONTROL

The specter of chemical and biological warfare arouses horror and revulsion throughout the world.[1]

WHILE NOT A PARTY TO THE GENEVA PROTOCOL OF 1925 the United States formally pledged at the U.N. General Assembly in 1966 and 1968 to adhere to its principles and objectives, which prohibit the first use in war of poison gas and biological methods of warfare. This has always been U.S. practice. It was apparent, however, that U.S. policy in this field was not sufficiently defined; and soon after taking office President Nixon directed a broad study within the National Security Council of U.S. policy, programs and operational concepts for chemical and biological warfare and agents.

Participants were the Department of State, the Department of Defense, the Central Intelligence Agency, the Arms Control and Disarmament Agency, and the President's Special Assistant for Science and Technology. The NSC Interdepartmental Political-Military Group was given the responsibility for leadership.

The study covered every aspect of the question. The participants were instructed to delineate the nature of the threat to the United States and its Allies and possible alternative approaches in meeting the threat; to discuss the utility of and circumstances for possible employment of chemical and biological agents; to define research and development objectives; to review current applications of U.S. policy relating to chemical riot control agents and chemical defoliants; and to assess the implications of chemical warfare and biological research programs for U.S. foreign relations. Task forces were organized to analyze the problem from the standpoint of foreign capabilities, the U.S. chemical warfare and biological research program, and international considerations.

ACDA participated in the task forces chaired by the Departments of State and Defense. ACDA personnel chaired the task force studying arms control considerations, including the question of ratification of the 1925 Geneva Protocol.[2]

The protocol had been drafted in 1925 at the instigation of the United States. Moved by the large scale destructive effects of poison gas used by both sides during World War I, the United States proposed to the Geneva Conference on Traffic in Arms a convention banning the use in war of poison gas and biological methods of warfare. The United States signed the protocol, and it was favorably reported by the Senate Foreign Rela-

[1] Message from President Nixon to the ENDC, July 3, 1969.

[2] See Appendix V, p. 47.

Ambassador James F. Leonard, head of the U.S. delegation to the Conference of the Committee on Disarmament (left) with Ambassador Alexey A. Roshchin, head of the Soviet delegation. The two are Co-Chairmen of the Committee.

tions Committee. The protocol was never voted upon by the full Senate and was returned to the Committee in December, 1926. There it lay until 1947 when it was returned to the executive branch as one of a group of treaties and agreements on which action had not been taken for many years. The protocol came into force without the United States becoming a party and now has 84 adherents, including all other NATO countries, the Warsaw Pact nations, and Communist China. Of the major industrial powers, only the United States and Japan have not yet become parties.

In mid-November the interdepartmental review was presented to the National Security Council. After consideration by the NSC, the President announced his policy decisions on November 25.[1] He reaffirmed our long-standing renunciation of the first use of lethal chemical weapons and extended this renunciation to the first use of incapacitating chemicals.

With respect to the biological program, his decisions were to renounce any use of lethal or incapacitating biological agents and weapons, and all other methods of biological warfare; to confine biological research to defensive measures such as immunization and safety measures; and to call on the Department of Defense to recommend plans for the disposal of existing stocks of biological weapons. He associated the United States with the principles and objectives of the British draft convention to ban biological warfare which had been presented at the Geneva Conference of the Committee on Disarmament on August 26, 1969.[2]

In consonance with these decisions, the President announced that he would submit the Geneva Protocol to

[1] See Appendix IV, p. 45.

[2] See Appendix VI, p. 48.

the Senate for its advice and consent to ratification.

It would clearly be in the interest of the United States to have reliable international agreements under which all nations would accept prohibitions on chemical and biological weapons, and it is official U.S. policy to work toward such agreements. At the opening of the Geneva disarmament talks on March 22, the President instructed the U.S. delegation to "join with other delegations in exploring any proposals or ideas that could contribute to sound and effective arms control relating to these weapons." This position is consistent with the strong sentiments for outlawing chemical and biological warfare which have found expression during the past year in many international forums.

In December 1968 the General Assembly adopted a resolution requesting the U.N. Secretary-General to prepare a report on the effects of the possible use of chemical and bacteriological (biological) means of warfare. The study, prepared with the assistance of experts from 14 countries including the United States, was issued on July 1, 1969. Prominent among the report's conclusions were (1) the effects (on both victim and initiator) of chemical and biological weapons, if used on a large scale in war, were virtually unpredictable; (2) despite cost factors, any country could achieve at least a minimal capability in these fields; and (3) a ban on the development, production, and stockpiling of chemical and biological agents intended for purposes of war would facilitate international efforts toward broader arms control agreements.

The question of chemical and biological weapons was high on the agenda of the Geneva Conference of the Committee on Disarmament during its 1969 sessions.

The CCD's report to the United Nations, prepared at the end of the session which adjourned October 30, noted the wide support for the purposes and principles of the 1925 Geneva Protocol and stated that the Committee would "continue intensive work on the problem of chemical and bacteriological (biological) warfare."

In the General Assembly the principal developments were (1) the introduction of a Soviet draft treaty which would ban all chemical and biological weapons but which did not provide for adequate inspection; (2) the adoption of a Swedish resolution (which the United States voted against), whose purpose was to declare as contrary to international law all chemical and biological agents of warfare, including riot control agents and herbicides; and (3) adoption of a Canadian Resolution which called on all nations to accede to the 1925 Geneva Protocol, recommended that the U.N. Secretary-General's report be used as a basis for the CCD's further consideration of the elimination of chemical and biological weapons, and referred the British and Soviet draft conventions to the CCD for further study.

It can be expected, therefore, that when the CCD reconvenes in February 1970, the question of chemical and biological weapons will receive considerable attention.

In approaching this problem from an arms control perspective, it is important to recognize that there are basic differences between chemical and biological means of warfare that indicate they should be dealt with separately. These differences relate not only to technical aspects, such as toxicity, speed of action, duration of effects, controllability and residual effects, but also to their different military roles. One of the greatest values of the NSC study was the identification of these differences.

The President has supported the principles of the British initiative on biological weapons, although there

are certain aspects of the draft convention which in the course of negotiations we will seek to clarify or further refine.

Limitations on chemical weapons raise more difficult problems. Extensive research has shown that a skillful and determined evader could make it difficult to detect his violations of a ban on production or possession of chemical weapons. Research into sensors and detection techniques is continuing, in coordination with other government agencies, and potentially promising developments are being tested. The current ACDA program will provide more insight into the probabilities of detecting clandestine or undeclared activities.

With the cooperation of the Department of Defense, ACDA is working out plans to investigate the problems of verifying the declared destruction of chemical weapons; these investigations will be conducted in connection with actual destruction and demilitarization operations to be carried out by the Department of Defense.

For chemical and biological weapons, ACDA research has developed a number of indicators for use by inspectors. In December Howard Furnas, Special Assistant to the ACDA Director, told a House Foreign Affairs Subcommittee, "We believe that major progress can be made toward resolving the technical problems involved in verification by direct observation, and we intend to devote greater efforts to this end."

ARMS CONTROL MEASURE FOR THE SEABED

. . . there is intrinsic merit in our seeking to prevent a nuclear arms race on the seabed while there is still time.

. . . The significance of action to preclude new types of arms races from beginning should never be underemphasized if we are to be successful in our efforts to halt the arms race.[1]

THE SEA AND THE OCEAN FLOOR HAVE BEEN CALLED THE WORLD'S LAST FRONTIER for exploration and exploitation. The development of food from the sea offers high promise toward meeting the widespread need for protein (malnutrition afflicts one-half of the world's peoples—over one and a half billion). There are interesting prospects for new discoveries in the field of medicine. By the year 1985, some 25 percent of the worldwide demand for oil and gas is expected to be met by marine sources. Marine mineral deposits include manganese, gold, silver, iron, platinum, titanium, chromium, and tin, to name but a few, and are conservatively valued in the hundreds of billions of dollars.

But together with the promise of great benefits from technological advances in oceanology there are also continuing advances in the technology of weaponry, which could result in the extension of the nuclear arms race to the seabed and ocean floor.

A significant step was taken by the United States and the Soviet Union to rule out this environment to nuclear weapons when they reached agreement on a joint draft treaty "on the prohibition of the emplacement of nuclear weapons and other weapons of mass destruction on the seabed and the ocean floor and in the subsoil thereof." [2] The joint draft was first presented to the Conference of the Committee on Disarmament in Geneva, on October 7, by the two nations as Co-Chairmen of the Committee. The treaty project was the result of intensive negotiations which had their origin in the U.N. General Assembly in 1967.

As interest mounted in the almost unlimited resources of the seabed, it became evident that a legal framework must be established to bring order to their exploitation. Concepts of sovereignty vary widely. Existing international law is ambiguous and lends itself to disparate interpretations by nations.

With these concerns in mind, the General Assembly in December 1967 established an *ad hoc* committee (made a permanent committee a year later) to study the scope and various aspects of the peaceful uses of the

[1] Address by ACDA Director Gerard Smith to the ENDC, Mar. 25, 1969.

[2] See Appendix VII, p. 51.

seabed and ocean floor beyond the limits of national jurisdiction. Considerable attention was given to the "trends and possibilities regarding the potential future uses of the seabed and ocean floor for military purposes," in the committee's report, which recognized that "efforts should be made to arrest these trends before they were too advanced for effective control."

During the course of the working sessions of the U.N. committee, the U.S. representative proposed that the Geneva Disarmament Conference examine the question whether a viable international agreement might be achieved in which each party would agree not to emplace or fix weapons of mass destruction on the seabed. These discussions would also consider the need for reliable and effective means of verifying compliance with such an agreement.

The question was discussed in a preliminary way during the 1968 summer session of the Eighteen-Nation Committee on Disarmament and was included on its provisional agenda for consideration during the 1969 session.

The Conference reconvened on March 18, 1969. On the opening day, the Soviet Union submitted a Draft Treaty on Prohibition of the Use for Military Purposes of the Sea-Bed and Ocean Floor and the Subsoil Thereof.

After consultations with its Allies, the United States, on May 22, submitted its own Draft Treaty Prohibiting the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and Ocean Floor.

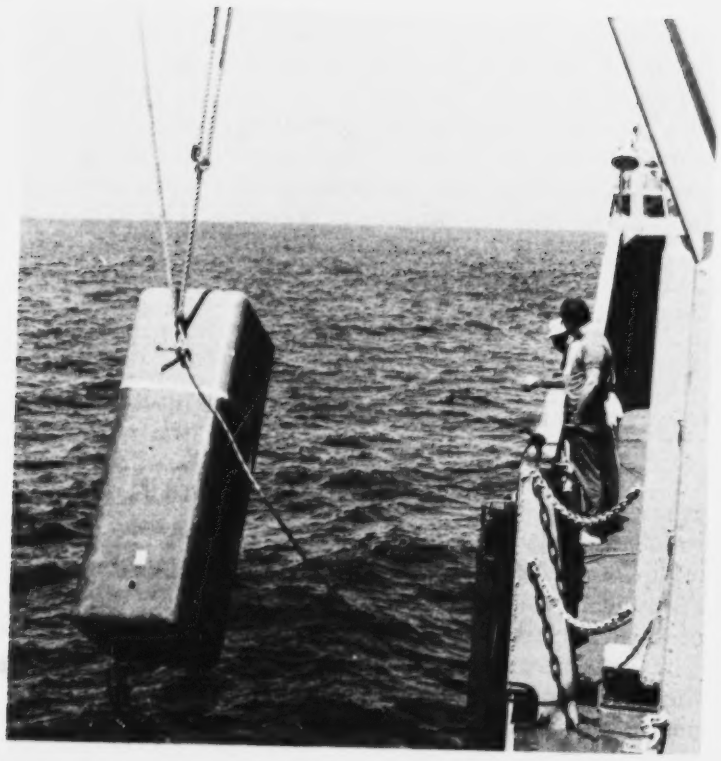
The initial U.S. and Soviet drafts differed principally in the scope of what was to be prohibited.

The Soviet draft would have banned *all* military uses of the seabed and ocean floor beyond a 12-mile maritime zone. It would have precluded, as an example, bottom mounted submarine surveillance systems which the United States regards as essential to its defense. The United States also objected to such a sweeping prohibition because it would pose insurmountable verification problems. The U.S. draft dealt with the most realistic concern—that the seabed might be used as an area for the emplacement of nuclear weapons and other weapons of mass destruction. Such an agreement would remove the major threat to the peaceful uses of the seabed while, at the same time, would reduce the verification problem to manageable proportions.

The Soviet draft provided that all installations and structures on the seabed should be open to inspection for the purposes of verification, a provision qualified only by the requirement of reciprocity. This language was modeled on the provisions in the Outer Space Treaty. But provisions applicable to the moon, where all claims of national jurisdiction are renounced, cannot readily be transplanted to the seabed, where there are many existing claims of national jurisdiction and a multitude of varying types of activity and where the technical problems involved in inspection would be extremely complex.

The U.S. draft suggested simple procedures for verifying compliance, based on observation of seabed activities. Such procedures would be consistent with existing international law. The United States believed that its provisions for verification were appropriate because the installation of large and complicated devices for launching nuclear weapons would involve extensive activity and would be difficult to conceal. Furthermore, it is highly unlikely that a nation which had decided to violate the treaty would limit itself to the installation of a single weapon. Any violation to be worth the cost would have to occur on a large scale.

The Arms Control and Disarmament Agency has undertaken a series



A transponder and buoy are lowered into the sea to determine precise navigational position of the USNS *Mizar* during the search for the lost submarine *Thresher*. ACDA participated in the search to gain practical knowledge of seabed surveillance.

of field studies and technical reports concerned with the technological problems of seabed activity verification, including analyses of cost factors associated with various verification techniques. In order to gain practical knowledge of some aspects of seabed search, staff members participated in two deep seabed searches conducted by the USNS *Mizar*.

The Geneva Conference resumed its second session of 1969 on July 3. The previous submission by the United States and the U.S.S.R. of draft seabed treaties provided the basis for concrete negotiations to work out an agreed treaty that might be referred to the twenty-fourth session of the U.N. General Assembly. During the following weeks, various member nations voiced their views on the two versions, particularly with respect to the verification question and the scope of the prohibitions.

On July 24 ACDA's General Counsel, William Hancock, testified before the Subcommittee on Ocean Space of the Senate Committee on Foreign Relations, chaired by Senator Claiborne Pell. The day marked the beginning of a series of public hearings on Senate Resolution 33, introduced by Senator Pell earlier in the year, "a resolution endorsing basic principles for governing the activities of nations in ocean space." Mr. Hancock's testimony reviewed for the Subcommittee the U.S. draft treaty presented to the ENDC and the progress which the ENDC had made to date in its discussion of an arms control measure for the seabed.

In late August the Soviet Co-Chairman gave the U.S. delegation pri-

vately a new text of a treaty. There followed an intensive evaluation of the Soviet counter-proposal within the U.S. Government. By mid-September a coordinated position had been formed, and a special session of the North Atlantic Council was called so that we could consult with our NATO Allies on the proposed basis for further negotiations in Geneva. A new draft was then presented privately to the Soviet delegation.

On October 7 the United States and the Soviet Union jointly tabled an agreed Draft Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-bed and the Ocean Floor and the Subsoil Thereof. On the occasion of the joint tabling, the U.S. representative, Ambassador James Leonard, told the Conference of the intensive discussions which had led to the new joint draft and expressed satisfaction that "our labors have proved fruitful." This joint draft formed the basis of discussions within the CCD (successor to the ENDC) and received a number of comments, particularly with respect to verification, amendment procedures, and a review conference. Responding to the views expressed by various delegations, the Co-Chairmen put forth a revised version on October 30. This revised treaty text was annexed to the report of the CCD to the General Assembly.

At the United Nations, the draft treaty was considered briefly by the U.N. Seabed Committee and extensively in the U.N. First Committee, where a number of amendments were suggested by various member nations. Although substantial progress was made, the questions raised by these initiatives were not entirely resolved during the course of the debate in the First Committee. Accordingly, on December 12 the United States and the Soviet Union offered a resolution which remanded the draft treaty text of October 30 to the Conference of the Committee on Disarmament. The resolution called on the Committee to take into account all proposals and suggestions made at the General Assembly and to continue its work so that the text of a draft treaty can be submitted to the twenty-fifth session of the General Assembly. This resolution passed by a vote of 116 to 0, with 4 abstentions.

NONPROLIFERATION OF NUCLEAR WEAPONS

This Administration seeks equitable and meaningful agreements to limit armaments and to resolve the dangerous conflicts that threaten peace and security. In this act of ratification today, this commitment is demonstrated anew.[1]

THE DIPLOMATIC HISTORY OF THE TREATY ON THE NONPROLIFERATION OF NUCLEAR WEAPONS spans the administrations of three Presidents. The last step in the domestic ratification process was taken by President Nixon on November 24 when he officially signed the instrument of ratification in a ceremony at the White House. The final step will be the international act of depositing the instrumenf of ratification.

The treaty was negotiated in the Eighteen-Nation Committee on Disarmament, in Geneva, over a period of 4 years. It was endorsed by the U.N. General Assembly in the spring of 1968 and was signed by President Johnson and the representatives of 55 other nations on July 1, 1968.

Soon after his inauguration, President Nixon sent a message to the U.S. Senate requesting advice and consent to ratification. The treaty had been sent to the Senate the preceding year, but action was suspended in the aftermath of the Soviet invasion of Czechoslovakia. Although the President's February 5 call for renewal of Senate consideration reiterated his condemnation of that Soviet action, he said, "I believe that ratification of the Treaty at this time would advance this Administration's policy of negotiation rather than confrontation with the USSR."

The Senate Foreign Relations Committee held new hearings on February 18 and 20, receiving testimony from Secretary of State Rogers; Secretary of Defense Laird; Chairman of the Atomic Energy Commission Seaborg; Chairman of the Joint Chiefs of Staff General Wheeler; and ACDA Director Gerard Smith and his Deputy, Adrian Fisher. The Senate Armed Services Committee held hearings on the military implications of the treaty. Director Smith and Deputy Director Fisher testified before this Committee for ACDA. The Chairman of the Joint Chiefs of Staff, the Director of Defense Research and Engineering, and the Chairman of the Atomic Energy Commission also testified.

All of these Administration officials gave full support to the treaty, and reiterated the interpretations given by the previous Administration on the technical issues raised and on the im-

[1] President Nixon, upon signing the instrument of ratification of the Treaty on the Nonproliferation of Nuclear Weapons, Nov. 24, 1969.

plications for our security commitments.

In June 1968 the United States, Great Britain, and the Soviet Union introduced a resolution in the U.N. Security Council giving security assurances to the nonnuclear-weapons nations who are parties to the treaty. All three governments made separate but parallel declarations to the Security Council in explanation of their affirmative votes on the resolution. In their declarations, the three nuclear powers state their intention "to seek immediate Security Council action to provide assistance, in accordance with the Charter, to any non-nuclear-weapon State party to the treaty on the non-proliferation of nuclear weapons that is a victim of an act of aggression or an object of a threat of aggression in which nuclear weapons are used."

In its report on the treaty, the Foreign Relations Committee stated that it thought the U.S. Government, by offering the resolution and the declaration, had given up an element of flexibility in bringing cases of aggression or threats of aggression to the attention of the Security Council, especially with respect to timing. The Committee observed, however, that if this action results in creating a framework for United States–Soviet cooperation in the United Nations, the "gesture will be worth the costs in diplomatic flexibility."

President Nixon signs the Instrument of Ratification for the Nuclear Nonproliferation Treaty. Looking on are Secretary of State William P. Rogers (left) and Secretary of Defense Melvin Laird.

The Committee favorably reported the treaty to the full Senate on March 6, and the Senate gave its consent to ratification on March 13 by a vote of 83 to 15.

The Committee's report contained a recommendation that the Administration endeavor to arrange for the United States and the Soviet Union to deposit their instruments of ratification concurrently, "thus emphasizing the historic nature of the event and avoiding insofar as possible misunderstandings which might otherwise arise." Accordingly, the United States proposed to the Soviet Union that the final step of ratification be completed by the two Governments in this manner. (Great Britain had already deposited its instrument of ratification in November 1968, and France and Communist China have indicated publicly that they do not intend to sign.) Arrangements are being worked out between the U.S. and the Soviet Governments, and it is expected that a joint ceremony will take place early in 1970. The treaty will enter into force when the three depositary governments and 40 other nations have deposited their instruments of ratification.

Under article III, each nonnuclear-weapon state party to the treaty undertakes to accept safeguards on its peaceful nuclear activities in order to insure that fissionable materials are not diverted to nuclear weapons or other nuclear explosive devices. These safeguards will be set forth in agreements to be negotiated and concluded with the International Atomic Energy Agency (IAEA) in accordance with the Statute of the IAEA and its safeguards system. The agreements may be negotiated with the IAEA by nations individually or in concert with other nations. Article III stipulates that negotiations for the agreements shall begin 180 days from the date of entry into force of the treaty. For those nations depositing their instruments of ratification or accession after the 180-day period, negotiation shall commence not later than the date of deposit. The agreements shall enter into force not later than 18 months after the date of initiation of negotiations.

The IAEA's safeguards system will assume greatly increased safeguards responsibilities as the Nonproliferation Treaty comes into force and the agreements are concluded. ACDA's research in support of the treaty is directed toward the development of techniques, procedures, instruments, and devices that might be used in international safeguards inspection.

The ACDA safeguards research program is closely coordinated with the Atomic Energy Commission to avoid duplication and, in fact, draws upon the expertise of the AEC and its contractors in carrying out some of the projects. The program is also coordinated with the IAEA and with other foreign safeguards research programs such as those of the European Atomic Energy Community (EURATOM), the United Kingdom and the Federal Republic of Germany.

In connection with ACDA's research on the instrumentation aspects of the safeguards problem, a portable instrument has been designed to detect and measure plutonium inside a sealed container. A prototype of this instrument has been designed and built under ACDA auspices. It has been evaluated by the IAEA and found to be capable of determining not only the presence of plutonium but the amount. Plutonium is a by-product of the fission process which takes place in certain nuclear reactors, and it can be used as the essential element in the production of nuclear weapons. The detection of a clandestine diversion of plutonium to weapons purposes, therefore, is one of the basic reasons a safeguards system is needed.

The use of unattended sensors for arms control inspection has consider-

able appeal from the point of view of reducing the cost, manpower, and intrusiveness of inspections. A complete sensor system might include a number of sensors of different types, each gathering its own form of information and transmitting this through a data link to a central recording unit. There the information would be stored for later use by the inspector. Unattended sensor systems should be tamper-resistant to the extent they would reliably detect and reveal any efforts to insert false information. ACDA is currently working on the major parts of such a system.

The development of a prototype tamper-resistant data link is nearing completion. The concept for this secure data transmission system was originally developed under an external contract with ACDA. During the past 18 months, it has been field tested by the Agency's Field Operations Division, working in the facilities of the National Bureau of Standards. The results of the tests have now produced a cable of proven tamper-resistance. Preparations are under way to test a small diameter cable of different configurations in order to broaden the range of applicability of this means of data protection. The system will be employed in the inspection of nuclear reactors under IAEA control.

The remaining parts of the unattended instrumentation system are being developed under the direction of a joint U.S.–Canadian working group to safeguard a continuously refuelled CANDU-type reactor. ACDA is funding the fabrication of this instrumentation at Sandia Corporation, and it will be field tested in two phases. The first phase, devoted to testing individual components and equipment, is now being carried out by ACDA's Field Operations Division, working with the National Bureau of Standards. The second phase will test the instrumentation operating as a system on the reactor.

Still another area of research, carried out jointly with the AEC, is investigating the application of minor isotope techniques to safeguards. A field test of these techniques was made during 1969 at the Nuclear Fuel Services facility at West Valley, N.Y., and preliminary results are very encouraging. Prediction of uranium to plutonium conversion, "fingerprinting" of reactor fuel, and in-process inventory determination all appear feasible and practical using mass spectrometer measurements of the minor isotopes.

Research into minor isotope safeguards techniques (MIST) is also being conducted by a group in Karlsruhe, Germany. Evaluation of the German experiments together with the evaluation of the Nuclear Fuel Services' MIST experiment will provide the basis for future planned research to be conducted by a joint U.S.–German working group. It is anticipated that both the EURATOM and IAEA safeguards organizations will also participate in these experiments.

The Agency has also contributed to preparations for the implementation of article V of the NPT, under which potential benefits of peaceful applications of nuclear explosions are to be made available to nonnuclear-weapons states parties to the treaty. An Agency representative testified in hearings before the Joint Committee on Atomic Energy on proposed legislation to give the Atomic Energy Commission authority to carry out commercial applications of peaceful nuclear explosions. ACDA participated in several interdepartmental studies related to this subject, in technical talks held with the Soviets in April 1969, in U.S. contributions to the IAEA study of this subject, and in discussions at the Geneva disarmament conference and the U.N. General Assembly.

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CONVENTIONAL ARMS AND MILITARY EXPENDITURES

We must pursue with much more energy and realism our common responsibility to check the dangerous and costly arms race. . . . Nor is the need for disarmament limited to the great powers and nuclear weapons. All the wars now being fought are being fought with conventional arms; it is the evermounting burden of conventional armament which weighs on the poorest nations and is one of the most serious impediments to their economic, social, and political development.[1]

AMONG THE MAJOR PROBLEMS FOR URGENT ATTENTION IN THE 1970's is how to arrest the trend in military spending and the proliferation of armaments worldwide.

In 1969 worldwide military expenditures are estimated to have totaled $200 billion—an increase of over 40 percent since 1964.[2] Even allowing for the inflation of prices, world military outlays increased by close to 20 percent in the 6-year period from 1964 to 1969. The comparison with expenditures for social needs produces even more disparate figures. In 1967 the latest year for which comparative figures are available, the world was spending about 40 percent more on military programs than on public education; military expenditures exceeded those for public education in about one-third of the countries of the world, including the United States and the Soviet Union. In the field of public health, the world's total expenditure in 1967 was less than one-third as large as the military outlay.

In many parts of the world military expenditures compete for scarce national resources and may diminish current consumption and the opportunities for economic development. There is virtual unanimity among economists that a reallocation of resources from military purposes to civilian needs would be of general economic benefit. The question is what influences can be brought to bear to reverse the upward trend in military spending.

While world attention focuses on strategic arms negotiations, the Arms Control and Disarmament Agency believes that the problem of conventional arms must not be neglected. Measured in money terms, these are the weapons that account for the major share of the world's military outlays. Conventional weapons are the working tools of modern war. Since 1945 conventional forces with conventional weapons have fought fifty-five wars;

[1] Ambassador Charles W. Yost, in an address to the U.N. General Assembly, on Oct. 23, 1969.

[2] *World Military Expenditures* (ACDA Publication No. 53).

hundreds of thousands of people have been casualties.

The Agency is working on several approaches to the control of conventional arms. One is concerned with mutual and balanced force reductions between the NATO and Warsaw Pact countries, discussed in the following chapter.

Another critical problem in this field is the control of the international traffic in arms. The value of exports of military goods worldwide recently has averaged close to $4 billion a year; half or more of this has gone to the less developed parts of the world. Such purchases of equipment, particularly of the advanced types, may fuel regional arms races and have a broad destabilizing effect. While it can be argued that local disputes are not normally motivated by possession of armaments, the escalation of a dispute to hostilities and the intensity of subsequent fighting can often be directly attributed to the availability of weapons.

ACDA has been increasingly concerned with the problem of arms transfers since 1966 when a senior level interbureau working group was set up to coordinate and supervise Agency activities in this field and to maintain liaison with other departments and agencies on arms transfers and related export control. During the past year, responsibility for this activity was centralized in ACDA's Economics Bureau.

ACDA is a participant in a variety of interagency forums dealing with arms transfer policy formulation. These include the State/Defense Coordinating Committee on Arms Sales, the weekly meeting of the politico-military officers from the State Department's regional bureaus, and consultations on implementing the restriction on arms transfers included in foreign assistance legislation. ACDA's participation in the National Security Council, and its subordinate bodies, i.e., the Under-Secretaries Committee, the interdepartmental groups and *ad hoc* working committees, insures the Agency an opportunity to set forth arms control concerns in the policy decision process involved in arms sales and military assistance.

ACDA also develops and promotes proposals for controlling conventional arms traffic for consideration within the U.S. Government and possible international action. In pursuing this function, ACDA has concentrated on three general types of initiatives: (1) registration and publication proposals; (2) arms supplier agreements; and (3) regional arms limitations.

The idea for registering and publicizing arms transfers has been under intermittent consideration in the United Nations and elsewhere since 1965. In the immediate aftermath of the June 1967 war in the Middle East, the United States proposed, without success, that the U.N. member nations report all arms shipments into the Middle East and that the records be available for all to see.

Despite the lack of concrete progress, the Agency continues to explore this initiative as a possible opening approach to international arms traffic control. A broad study was made of the current reporting of arms transfers by foreign countries. An in-house report, completed in August 1969, summarized and analyzed the policy issues raised by a registration proposal. This study can serve as a contribution to policy formulation in the future.

Efforts at effecting arms supplier agreements have usually been associated with attempts to settle local wars, e.g., Arab-Israeli war in 1967, Indian-Pakistani war in 1965. Prior to and following the outbreak of hostilities in 1967, the United States sought agreement with the U.S.S.R. in curtailing arms shipments to the Middle East. These efforts were to no avail, and deliveries continue. Following the

outbreak of fighting between India and Pakistan in 1965, the United States and the United Kingdom declared immediate embargoes on arms shipments to the belligerents. These embargoes probably helped influence the two countries to accept a truce. The United States has continued to embargo lethal items. We have urged other suppliers, particularly the U.S.S.R., to follow suit, but again unsuccessfully.

These experiences show that, to be effective, suppliers' agreements must be adhered to by the major arms suppliers. Although history suggests that supplying countries are reluctant to give up what they regard as a useful political tool, there are conceivable situations in which it would suit the objectives of all major suppliers to exercise restraint. The Agency is constantly reviewing the evolution of the politico-military situations in the various regions of the world in an effort to ascertain when the ingredients necessary for such an arms control agreement are present.

Agreements which are politically feasible are more likely to be found in well-defined geographical areas. Hence, the Agency's concentration on regional arms limitation.

ACDA funds a program of external research to support its activities in the area of conventional arms control. This program has included research into the economic effects of defense expenditures on development progress, the volume and patterns of arms trade, the nature and control of local conflict, and political environment and its relation to arms control proposals.

As previously pointed out, economists are agreed that a shift of resources from military to civilian purposes would be economically beneficial. About two out of every five dollars of Federal budget outlays in the United States are for national defense purposes. These military requirements limit the Federal Government's freedom of action to carry out programs to meet the pressing needs of an expanding population and at the same time reduce the tax burden. However, it is recognized that if arms control and disarmament measures show promise of leading to reduced defense spending, every effort should be made to bring about an orderly transition during the change. The general prosperity of the country must be maintained and consideration given to the interests of those whose livelihood depends on the defense activity to be eliminated.

The Arms Control and Disarmament Agency is enjoined by statute to study and assess these problems. The research covers the identification of the industries, communities, and workers dependent on defense-related activity, and the kinds of policies and actions which would assist them in adjusting to a reduction in that activity. Supplementing earlier studies of the electronics and shipbuilding industries, a contract study was completed this year on the dependency of the metal working machinery and equipment industry on defense work. The study found that, despite the fact that the Defense Department is one of the largest ultimate consumers for capital goods, conditions in this industry essentially are "governed by the overall economic climate" rather than the changes in levels of defense spending.

Because of its broad research experience on the economics of reduced defense spending, the Agency has been in a position to assist interdepartmental groups established by the President to plan for analogous post-Viet-Nam economic adjustments.

MUTUAL AND BALANCED FORCE REDUCTIONS IN CENTRAL EUROPE

For many years NATO has given serious study to the difficult question of how security in Europe, now sustained by a high balance of armaments, could be maintained at a lower and less expensive level of arms on both sides. Since June 1968, it has explicitly stated its belief that mutual force reductions could significantly contribute to lessening of tensions.[1]

In 1969 the North Atlantic Treaty Organization (NATO) resumed its study of possible mutual and balanced force reduction (MBFR) for the central part of Europe, which had begun with the December 1967 Ministerial Meeting of the North Atlantic Council. The Soviet invasion of Czechoslovakia in August 1968 dimmed the prospects for discussions concerning European security, but even in the face of that severe setback the NATO Ministerial Meeting in mid-November of that year issued a communique stating, "Nevertheless, the Allies in close consultation are continuing their studies and preparations for a time when the atmosphere for fruitful discussions is more favorable."

At their April 1969 meeting in Washington, the NATO Ministers gave new impetus by issuing another statement declaring their intention to "explore with the Soviet Union and the other countries of Eastern Europe which concrete issues best lend themselves to fruitful negotiation and an early resolution" and to pursue their efforts and studies in the field of disarmament and practical arms control, including balanced force reductions.

The work of NATO on MBFR was intensified and refined at the June and September meetings of the Senior Political Committee and experts from NATO capitals, and an initial report was submitted to the North Atlantic Council. Consideration of that report and others on associated European security issues led the NATO Ministers to announce at their December 1969 meeting that "the studies in mutual and balanced force reductions have progressed sufficiently to permit the establishment of certain criteria which, in their view, such reductions should meet" and "they will continue their studies in order to prepare a realistic basis for active exploration at an early date and thereby establish whether it could serve as a starting point for fruitful negotiations." The Ministers requested that detailed plans of various possible balanced

[1] Secretary of State Rogers, Brussels, Belgium, Dec. 6, 1969.

force reductions be prepared for consideration and submitted to them as soon as possible. The Ministers concluded that "significant reductions under adequate verification and control—which should also be consistent with the vital security interests of all parties—would be another concrete step in advancing 'along the road of ending the arms race and of general and complete disarmament,' including nuclear disarmament." Finally, the Ministers directed that further studies should be given to measures which could accompany or follow agreement on mutual and balanced force reductions. The Ministers specified that such measures could include "advance notification of military movements and maneuvers, exchange of observers at military maneuvers and possibly the establishment of observation posts."

With this detailed guidance it is to be expected that NATO will continue to intensify its work with a view to submitting to the Ministers in May 1970 detailed plans on MBFR. ACDA will continue to provide experts to work with other responsible U.S. Government agencies and the NATO Senior Political Committee on these MBFR studies.

In support of the NATO MBFR studies, the ACDA staff concentrated during 1969 on exploiting the extensive research conducted over the past several years related to arms control measures applicable to the military confrontation in Central Europe. Of particular value have been those studies on the impact of potential arms control measures on ground forces capabilities in Europe and those specifically concerned with the inspection and verification of various forms of balanced force reductions in the central part of Europe. During the year a final report was completed on Exercise FIRST LOOK, a field test related to inspection and verification of general purpose ground and air forces which was conducted jointly with the United Kingdom in southern England in 1968. The results of that test as well as the results of related ACDA research on verification have been useful in NATO MBFR studies.

Previous research was supplemented in 1969 by a newly completed contract study on future Soviet interests in arms control. Another external study will identify the manner in which European security arrangements are likely to change during the 1970's. Such information will serve as a basis for recommending a variety of policy choices geared to promoting both security in Europe and arms control.

GENERAL ADVISORY COMMITTEE

THE ARMS CONTROL AND DISARMAMENT AGENCY'S LEGISLATIVE AUTHORITY provides for the appointment by the President of a General Advisory Committee, "to advise the President, the Secretary of State, and the Disarmament Director respecting matters affecting arms control, disarmament, and world peace."

President Nixon reconstituted the General Advisory Committee on June 5, 1969, with the appointment of fourteen new members and the reappointment of Mr. John J. McCloy as Chairman. They were confirmed by the Senate on July 30 and sworn in at a Blair House ceremony on October 2.

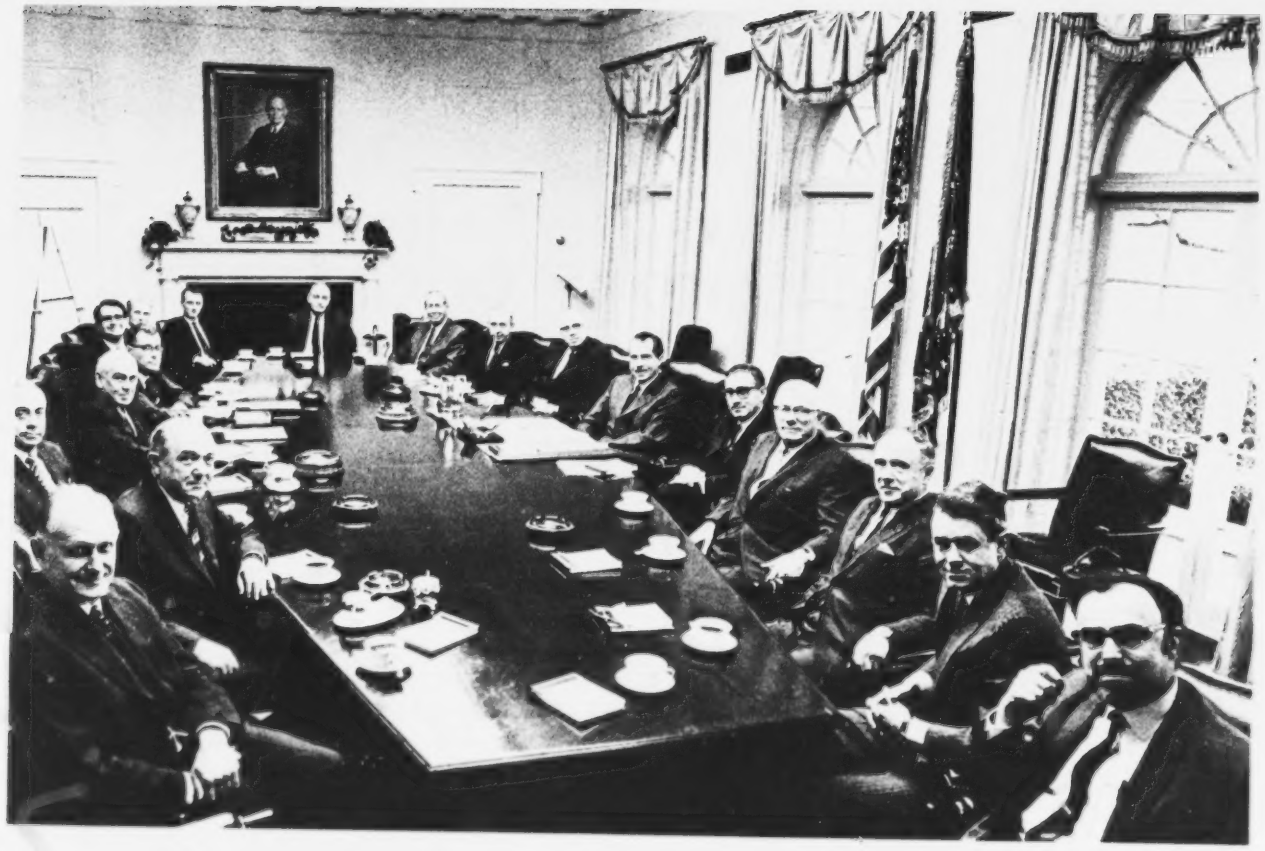
In charging the new Committee with its responsibilities, the President told them that the ". . . advice on the complex national security issues with which the Committee will be dealing will be of great value to me and my associates in the Administration. I consider our efforts in the area of arms control as an integral part of our security policies and I hope therefore that your Committee will examine the problems before it in the context of our over-all security interests and objectives." The President emphasized to Mr. McCloy that he wished the Committee to be an independent advisory body.

In the light of the President's guidance, the Committee promptly began to inform itself on the basic issues relating to national security. As a preliminary step, it began a series of intensive meetings to review the status of the strategic balance and to consider the relationship between U.S. arms control policy and U.S. national security needs. The Committee called upon a number of distinguished American and foreign experts on strategic matters to meet with it to discuss these issues.

The President met with the Committee during its meeting on December 16. He heard a report on what the Committee had done thus far and he laid several specific problems before it for study and advice in connection with the Strategic Arms Limitation Talks.

Meetings were also held to discuss U.S. relations with the Soviet Union, Communist China, and Western Europe as well as the specifics of arms control policy centering on the Strategic Arms Limitation Talks. Secretary of State Rogers; Under Secretary Richardson; Deputy Secretary of Defense Packard; the President's Assistant for National Security Affairs, Dr. Kissinger; the Chief of Naval Operations, Admiral Moorer; the Director of ACDA, Mr. Smith and his Deputy, Mr. Farley, among others, met with the Committee to discuss national security and arms control questions.

In addition, the Committee heard Professor Marshall Shulman, Ambassador Llewellyn Thompson, and Dr. Thomas Wolfe on the Soviet Union; Professors Allen S. Whiting and A. Doak Barnett on China; Mr. André Fontaine, Director of *Le Monde*,



President Nixon Meets With the General Advisory Committee
in the White House on December 16, 1969

Kermit Gordon

Philip J. Farley

William C. Foster

Lauris Norstad

James R. Killian

Peter G. Peterson

William J. Casey

Harold Brown

The President

John J. McCloy

Dr. Kissinger

William Scranton

I. W. Abel

Dean Rusk

John Archibald Wheeler

C. Douglas Dillon

Cyrus Vance

Jack Ruina

Paris; Dr. Karl Carstens, former adviser to the Chancellor of the Federal German Republic; Mr. Alastair Buchan, Commandant of the Imperial Defence College, London; and Professor Robert Bowie of the Center for International Affairs at Harvard on Western Europe. Meetings have been scheduled for the beginning of 1970 to continue this examination with a session on Japan and to address the specific problems raised by the President relating to the Strategic Arms Limitation Talks.

In order to assist the Committee in the performance of its work, the Chairman has a small staff located in the Committee's offices in the Department of State.

The members of the Committee, appointed by President Nixon, are:

JOHN J. McCLOY, lawyer, former adviser on Disarmament to President Kennedy, retired Chairman of the Chase Manhattan Bank, former Chairman of the Ford Foundation, of the World Bank, U.S. High Commissioner for Germany, and Assistant Secretary of War during the Second World War.

I. W. ABEL, President of the United Steel Workers of America.

Dr. HAROLD BROWN, scientist, President of the California Institute of Technology and former Secretary of the Air Force.

WILLIAM J. CASEY, author, editor, and lawyer.

C. DOUGLAS DILLON, banker, former Ambassador to France, former Under Secretary of State, and Secretary of the Treasury.

WILLIAM C. FOSTER, former Director of the Arms Control and Disarmament Agency and former Deputy Secretary of Defense.

KERMIT GORDON, economist, President of the Brookings Institution, former member of the Council of Economic Advisers, and Director of the Bureau of the Budget.

Dr. JAMES R. KILLIAN, Chairman of the Corporation of Massachusetts Institute of Technology, former Special Assistant to the President for Science and Technology.

Gen. LAURIS NORSTAD, USAF (Ret.), Chairman of the Board and President of the Owens-Corning Fiberglas Corporation, former Supreme Allied Commander in Europe (SHAPE).

PETER G. PETERSON, business executive, Chairman of the Board of Bell and Howell.

Dr. JACK RUINA, scientist, Professor of Electrical Engineering at Massachusetts Institute of Technology, former President, Institute for Defense Analyses and Assistant Director for Defense Research and Engineering, Department of Defense.

DEAN RUSK, former Secretary of State.

Gov. WILLIAM SCRANTON, lawyer, former Governor of Pennsylvania and Member of Congress.

CYRUS VANCE, lawyer, former Deputy Secretary of Defense.

Dr. JOHN ARCHIBALD WHEELER, scientist, Joseph Henry Professor of Physics at Princeton.

AGENCY OPERATIONS

Organization

THE ARMS CONTROL AND DISARMAMENT ACT ASSIGNS TO THE U.S. ARMS CONTROL AND DISARMAMENT AGENCY the primary responsibility within the U.S. Government for searching out ways to put an end to the arms race. The Act provides that the Agency "must have such a position within the Government that it can provide the President, the Secretary of State, other officials of the executive branch, and the Congress with recommendations concerning United States arms control and disarmament policy, and can assess the effect of these recommendations upon our foreign policies, our national security policies, and our economy."

When President Nixon announced the appointment of Gerard Smith to be Director, he specified that the Director will have direct and ready access to the Secretary of State and to the President and will participate in all meetings of the National Security Council at which matters within the scope of the mission of the Agency are considered.

In addition to being the principal adviser on arms control and disarmament to the President and Secretary of State, ACDA's Director is also the chief U.S. negotiator in the field of arms control. On July 5, 1969, the President designated him as head of the U.S. delegation to the Strategic Arms Limitation Talks. The Director, the Deputy Director, and the Assistant Director for International Relations, at different periods during the year, also served as head of the U.S. delegation to the Conference of the Committee on Disarmament (formerly the ENDC) in Geneva. The Director and the Assistant Director for International Relations were members of the American delegation to the twenty-fourth U.N. General Assembly.

To carry out its functions and responsibilities, ACDA has an organizational structure which, in addition to the Offices of the Director and Deputy Director, includes four bureaus, each headed by an Assistant Director. These are the International Relations Bureau, the Science and Technology Bureau, the Economics Bureau, and the Weapons Evaluation and Control Bureau. Supporting the Director, Deputy Director, and the four bureaus are the Office of the General Counsel, the Executive Director and the Public Affairs Adviser.

The ACDA staff is comparatively small—slightly more than 200—and is drawn from a variety of disciplines—political, military, scientific, legal, behavioral, and economic. The work of the Agency falls primarily into two categories: formulation of arms control and disarmament policy recommendations, including preparation for and management of international negotiations; and research into the myriad complex problems related to arms control and disarmament. In addition to ACDA's extensive internal research, field testing, and analysis, research projects are conducted by outside contractors, with ACDA

officers acting as monitors. ACDA also maintains a list of consultants whose expertise is drawn upon by the Agency for special projects or other problems.

Formulation and Coordination of Policy Recommendations

Every major new proposal which the United States makes in international negotiations must first receive the President's approval.

One of President Nixon's first acts upon taking office was to direct that the National Security Council (originally constituted in 1947) be the principal forum for consideration of policy issues requiring Presidential determination. The nature of the issues considered by the Council, in its revitalized role, range from current crises and immediate operational problems to middle- and long-range planning. The Director makes policy recommendations to the President both directly and through his participation in relevant meetings of the National Security Council. The Director's role in NSC deliberations is in keeping with the underlying principle contained in the Agency's enactment bill, that "Arms control and disarmament policy, being an important aspect of foreign policy, must be consistent with national security policy as a whole."

Representatives of the Agency participate, when arms control and disarmament or related matters are being considered, in the Under-Secretaries Committee, the National Security Council Review Group, and the various interdepartmental, regional, and functional groups established under the National Security Council to study specific national policy problems and to plan and carry out programs.

ACDA staff maintain day-to-day contacts with personnel in concerned departments and agencies in the development of ideas, the preparation of position papers, and the dispatch of policy guidance to the negotiators at the conference table.

Planning and Coordination of Research

The ACDA Research Council reviews and makes recommendations to the Director on all aspects of the ACDA external research program, including specific contracts. The Council is made up of the Special Assistant to the Director, who serves as chairman; the Assistant Directors who head the four bureaus; the General Counsel; and the Executive Director. A Research Planning Group assists the Council in developing, coordinating, and evaluating the research program. The Executive Secretary of the Council is chairman of the Planning Group and the other members are representatives of the four bureaus.

The Congress has charged the Agency with responsibility for coordinating research in the field of arms control and disarmament throughout the Government. ACDA staff personnel maintain working level relationships with their counterparts in other agencies—such as the Departments of Defense and State, the Atomic Energy Commission, the Central Intelligence Agency, and the Departments of Commerce and Labor—with which ACDA shares mutual interests and problems. ACDA coordinates formally with these agencies all of the external research projects it plans to carry out. The Agency also reports to the Bureau of the Budget periodically on the progress being made in arms control and disarmament research.

ACDA's sponsored research on foreign areas in the social sciences is coordinated closely with the State Department's Foreign Area Research Coordination Group, which is

charged with coordinating all such research throughout the Government. ACDA sits on the main committee of this Group and also participates in a number of subcommittees concerned with the interchange of research data and discussion of future plans. All of ACDA's foreign area external research in the social sciences is also formally cleared with the Department of State's Foreign Affairs Research Council, in order to insure that it will not have adverse effects on U.S. foreign relations.

ACDA maintains a Reference Information Center as a central point for storing and retrieving its arms control and disarmament information, much of it derived from the Agency's research program.

To help ACDA coordinate the execution of its mission in the field of inspection, verification, and associated field testing, a Joint Advisory Committee has been established. This Committee is chaired by ACDA; its members come from the Department of State, CIA, AEC, NASA, and key DOD components including ISA, DDR&E, JCS, DASA, and the military services.

Social Science Advisory Board

The ACDA Social Science Advisory Board [1] was established in March 1964 by the Director under his statutory authority to advise on the social science aspects of the Agency's programs. In 1969 it held two meetings: on March 26–27 and November 6. During these sessions, the members of the Board were briefed on current arms control and disarmament programs and on the status of the Agency's social science programs.

In the intervals between meetings, Board members were called upon for advice and assistance with regard to specific research projects under way in ACDA or with regard to new proposals under consideration.

Members of the Board represent an important channel of communication between the Agency and the academic community. Through them, universities and individual scholars can be acquainted with ACDA's plans for new research, and with the results of completed studies.

Three members of the Board are on the National Academy of Sciences Committee which advises in the selection of candidates for the Agency's Dissertation Support Program which was instituted in 1968.

Public Information

The Arms Control and Disarmament Act gives the Agency responsibility for "the dissemination and coordination of information concerning arms control and disarmament."

Daily liaison with the press is maintained by the office of Public Affairs by responding to individual calls and visits from members of the press corps. In addition, the Public Affairs Office—in coordination with other Government agencies—provides the State Department News Office with background material on arms control and disarmament policy and factual answers to press inquiries on developing news stories which might arise during the Daily News Briefing.

Either the Public Affairs Adviser or a senior member of his staff is a member of the U.S. delegations to major international arms control and disarmament conferences. During 1969, in addition to providing members of the press with news guidance at the Geneva Disarmament Conference and the U.N. General Assembly, the Public Affairs Adviser attended the Strategic Arms Limitation Talks held in Helsinki. In excess of 450 news rep-

[1] For members of the Board, see Appendix VIII, p. 54.

resentatives from various parts of the world covered the opening of the talks.

Direct information service to the public is provided through preparation and distribution of publications, booking of Agency officers to address organizations, schools, and public meetings, participation by Agency officers in conferences and seminars, assistance to schools and colleges, consultation with organization leaders, briefings for student and adult visitors, and response to direct inquiries.

ACDA publications circulated during 1969 included the 8th *Annual Report* which surveys the Agency's activities and summarizes disarmament developments for the previous calendar year; *Documents on Disarmament,* 1968 (one of a series which annually reprints significant speeches, proposals and documents), *World Military Expenditures,* a statistical summary; the Quarterly Bibliography, produced under contract for ACDA by the Library of Congress, which summarizes articles and books; *Arms Control and National Security,* a "primer" on contemporary disarmament concepts and issues. These items may be obtained by writing to the Agency, although supplies are limited. They are sold by the U.S. Government Printing Office. All pamphlets and unclassified research reports are available to readers at the 96 depository libraries listed in Appendix IX of this report. These publications and unclassified research reports are increasingly finding use in college classrooms and study programs.

The Agency, upon request, provides speakers for schools, organizations, and public meetings. It requests that travel costs be defrayed by the host organization. The Agency regards "platform" travel of this sort as an opportunity to learn as well as to teach; officers are requested to report interesting ideas and suggestions developed in the course of question periods and discussions. Several important innovations have been generated through such contacts.

An ever-wider acceptance of arms control as an aspect of international relations has resulted in requests from school and university instructors for assistance in preparing arms control and disarmament segments of courses in political science, history, defense, and other subjects. Assistance has been rendered through office, telephone and mail consultations, and through direct briefings to students at the Agency's offices and on college campuses.

In order to learn something about the burgeoning academic interest in this field, the Agency, last September, sent a questionnaire to all institutions of higher learning in the United States, seeking information on instruction relating to arms control. The questionnaire asked what courses were devoted primarily to arms control, and also inquired about incidental references to arms control in courses in political science, sociology, other behavioral sciences, physical or natural sciences, law, international relations, military security or strategy, and other courses. The responses to the questionnaire are now being analyzed and a report is being prepared.

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Appendix I

Message From President Nixon to Ambassador Gerard C. Smith at the Opening of the Strategic Arms Limitation Talks at Helsinki, Finland, November 17, 1969

You are embarking upon one of the most momentous negotiations ever entrusted to an American delegation.

I do not mean to belittle the past. The Antarctic Treaty, the Limited Test Ban Treaty, the Outer Space Treaty, and most recently the Non-Proliferation Treaty, which we hope will soon enter into force, were all important steps along the road to international security. Other tasks remain on the agenda of the United Nations and the Conference of the Committee on Disarmament. Today, however, you will begin what all of your fellow citizens in the United States and, I believe, all people throughout the world, profoundly hope will be a sustained effort not only to limit the build-up of strategic forces but to reverse it.

I do not underestimate the difficulty of your task, the nature of modern weapons makes their control an exceedingly complex endeavor. But this very fact increases the importance of your effort.

Nor do I underestimate the suspicion and distrust that must be dispelled if you are to succeed in your assignment.

I am also conscious of the historical fact that wars and crises between nations can arise not simply from the existence of arms but from clashing interests or the ambitious pursuit of unilateral interests. That is why we seek progress toward the solution of the dangerous political issues of our day.

I am nevertheless hopeful that your negotiations with representatives from the Soviet Union will serve to increase mutual security. Such a result is possible if we approach these negotiations recognizing the legitimate security interests on each side.

I have stated that for our part we will be guided by the concept of maintaining "sufficiency" in the forces required to protect ourselves and our allies. I recognize that the leaders of the Soviet Union bear similar defense responsibilities. I believe it is possible, however, that we can carry out our respective responsibilities under a mutually acceptable limitation and eventual reduction of our strategic arsenals.

We are prepared to discuss limitations on all offensive and defensive systems, and to reach agreements in which both sides can have confidence. As I stated in my address to the United Nations, we are prepared to deal with the issues seriously, carefully, and purposefully. We seek no unilateral advantage. Nor do we seek arrangements which could be prejudicial to the interests of third parties. We are prepared to engage in bona fide negotiations on concrete issues, avoiding polemics and extraneous matters.

No one can foresee what the outcome of your work will be. I believe

your approach to these talks will demonstrate the seriousness of the United States in pursuing a path of equitable accommodation. I am convinced that the limitation of strategic arms is in the mutual interest of our country and the Soviet Union.

Address by the Honorable William P. Rogers, Secretary of State, November 13, 1969

Strategic Arms Limitation Talks

Next Monday in Helsinki the United States and the Soviet Union will open preliminary talks leading to what could be the most critical negotiations on disarmament ever undertaken. The two most powerful nations on earth will be seeking a way to curb what to date has been an unending competition in the strategic arms race.

The Government of the United States will enter these negotiations with serious purpose and with the hope that we can achieve balanced understandings that will benefit the cause of world peace and security. Yet we begin these negotiations knowing that they are likely to be long and complicated and with the full realization that they may not succeed.

While I will not be able to discuss specific proposals tonight, I thought it might be helpful to outline the general approach of our Government in these talks.

Nearly a quarter of a century ago, when we alone possessed nuclear power, the United States proposed the formation of a United Nations Atomic Development Authority with a world monopoly over all dangerous aspects of nuclear energy. This proposal might well have eliminated for all nations the dangers and burdens of atomic weapons. Unhappily, as we all know, it was rejected.

The implications were obvious. Others intended to develop nuclear weapons on a national basis. The United States then would have to continue its own nuclear program. It would have to look to its own security in a nuclear-armed world. Thus we established a national policy of maintaining nuclear weapon strength adequate to deter nuclear war by any other nation or nations. It was our hope then, as it is now, to make certain that nuclear weapons would never again be used.

The intervening decades have seen enormous resources devoted to the development of nuclear weapons systems. As both sides expanded their force levels, an action/reaction pattern was established. This pattern was fed by rapid progress in the technology of nuclear weapons and advanced delivery systems. The mere availability of such sophisticated technology made it difficult for either side by itself to refrain from translating that technology into offensive and defensive strategic armaments.

Meanwhile, strategic planners, operating in an atmosphere of secrecy, were obliged to make conservative assumptions, including calculations on what became known as the "worst case." The people responsible for planning our strategic security had to take account of the worst assumptions about the other's intentions, the maximum plausible estimate of the other's capabilities and performance, and the lowest plausible performance of our

own forces. The Soviets no doubt did the same.

Under these circumstances it was difficult during these many years for either side to conclude that it had sufficient levels of destructive power.

Yet that point in time has now clearly been reached. As absolute levels of nuclear power and delivery capability increased, a situation developed in which both the United States and the Soviet Union could effectively destroy the society of the other, regardless of which one struck first.

There are helpful mutual restraints in such a situation. Sane national leaders do not initiate strategic nuclear war and thus commit their people to national suicide. Also, they must be careful not to precipitate a conflict that could easily escalate into nuclear war. They have to take elaborate precautions against accidental release of a nuclear weapon which might bring on a nuclear holocaust.

In brief the nuclear deterrent, dangerous though it is, has worked.

The present situation—in which both the United States and the Soviet Union could effectively destroy the other regardless of which struck first—radically weakens the rationale for continuing the arms race.

Competitive accumulation of more sophisticated weapons would not add to the basic security of either side. Militarily it probably would produce little or no net advantage. Economically it would divert resources needed elsewhere. Politically it would perpetuate the tensions and fears that are the social fallout of the nuclear arms race.

So a capacity for mutual destruction leads to a mutual interest in putting a stop to the strategic nuclear arms race.

Nonetheless technology advances remorselessly. It offers new opportunities to both sides to add to their offensive and defensive strategic systems. Both sides find it difficult to reject these opportunities in an atmosphere of rivalry and in the absence of a verifiable agreement. It raises temptations to seek strategic advantages. Yet now such advantages cannot be hidden for long, and both sides will certainly take whatever countermeasures are necessary to preserve their retaliatory capability.

This is the situation in which the two sides now find themselves. Where national security interests may have operated in the past to stimulate the strategic arms race, those same national security interests may now operate to stop or slow down the race. The question to be faced in the strategic arms talks is whether societies with the advanced intellect to develop these awesome weapons of mass destruction have the combined wisdom to control and curtail them.

In point of fact, we have already had some successes in preliminary limitations.

> —We have a treaty banning military activities in Antarctica.
>
> —We have a treaty banning the orbiting of weapons of mass destruction in outer space and prohibiting the establishment of military installations on the moon or other celestial bodies.
>
> —We have reached agreement with the Soviet Union on the text of a treaty forbidding the emplacement of weapons of mass destruction on the ocean floors, about to be considered at the United Nations General Assembly.

These are agreements not to arm environments previously inaccessible to weapons. Manifestly there are fewer obstacles to such agreements than there are to agreements controlling weapons already deployed or under development.

But even in already "contaminated" environments there have been two important control agreements:

> —We have negotiated and ratified a Test Ban Treaty prohibiting the testing of nuclear weapons in the atmosphere, under water, and in outer space.
>
> —We have negotiated and are prepared at any time to ratify simultaneously with the Soviet Union a Nuclear Non-Proliferation Treaty.

It should be pointed out, though, that the main objective of a Nuclear Non-Proliferation Treaty is to prevent nonnuclear powers from acquiring atomic weapons. The treaty does not restrain any of the present nuclear powers from further development of their capabilities. The nonnuclear countries therefore tend to look upon the treaty essentially as a self-denying ordinance.

Accordingly, during the negotiations they insisted upon assurances that the nuclear powers would seriously pursue strategic arms negotiations. We concurred and incorporated a paragraph in the treaty which would require us to do so.

I mention this to underscore two points. *First,* that the disarmament agreements previously concluded have widely been regarded as confidence building, preliminary steps which hopefully might lead to more meaningful agreements on strategic arms. *Second,* when the United States and the Soviet Union ratify the NPT, they will agree to undertake negotiations in good faith for a cessation of the nuclear arms race.

However, given the complexity of the strategic situation, the vital national interests involved, and the traditional impulses to seek protection in military strength it is easy to be cynical about the prospects for the talks into which we are about to enter.

Nonetheless some basis for hope exists.

First is the fact that the talks are being held at all. The diplomatic exchanges leading up to these talks were responsible in nature. And the talks themselves will require discussion of military matters by both sides in which the veil of secrecy will have to be, if not lifted,at least refashioned. These factors lead us to the hope that the talks are being entered into seriously.

Second is the matter of timing. Previous disparity in nuclear strength has been succeeded by the situation of sufficiency of which I have already spoken. And because this condition will continue for the foreseeable future, the time then seems to be propitious for considering how to curb the race in which neither side in all likelihood can gain meaningful advantage.

Third is a mutuality of interest. Under present circumstances an equitable limitation on strategic nuclear weapons would strengthen the national security of both sides. If this is mutually perceived—if both sides conduct these talks in the light of that perception—the talks may accomplish an historic breakthrough in the pattern of confrontation that has characterized the postwar world.

May I pause to point out again that I do not wish to predict that the talks will be easy or that progress is imminent or for that matter likely. Mutuality of interest for states accustomed to rivalry is difficult to perceive. Traditions are powerful. Temptations to seek advantage run strong. Developments in other areas are bound to have an impact on these discussions.

Both parties will approach the talks with great caution and pursue them with immaculate care. The United States and the Soviet Union are entirely capable of protecting

Who knows the rewards if we succeed in diverting the energy, time and attention—the manpower and brainpower—devoted to ever more sophisticated weapons to other and more worthwhile purposes?

Speaking before the United Nations General Assembly 2 months ago, President Nixon said that he hoped the strategic arms talks would begin soon because "there is no more important task before us." And he added that we must "make a determined effort not only to limit the build-up of strategic arms, but to reverse it."

Just last week President Podgorny of the Soviet Union said: "A positive outcome of the talks would undoubtedly help improve Soviet-American relations and preserve and strengthen the peace." To that I say "Amen."

He added that: "The Soviet Union is striving to achieve precisely such results." Well, so are we; and in this we have the support of the military services, of the Congress, and of the American people.

To that end this Government approaches the Strategic Arms Limitation Talks in sober and serious determination to do our full part to bring a halt to this unproductive and costly competition in strategic nuclear armaments.

Appendix III

Communique on the Meeting of the Delegations of the United States of America and the Union of Soviet Socialist Republics on Questions of Curbing the Strategic Arms Race, December 22, 1969

In accordance with the agreement reached between the Governments of the United States of America and the Soviet Union to enter into negotiations on curbing the strategic arms race, the delegations of the USA and the USSR met in Helsinki from November 17 to December 22, 1969, for preliminary discussions on the questions involved.

The U.S. Delegation was headed by the Director of the Arms Control and Disarmament Agency, Gerard Smith. Members of the delegation included Paul Nitze, Llewellyn Thompson, Harold Brown, and Royal Allison.

The USSR Delegation was headed by Deputy Minister of Foreign Affairs of the USSR, V. S. Semenov. Members of the delegation included N. V. Ogarkov, P. S. Pleshakov, A. N. Schchukin, N. N. Aleksev, and G. M. Kornienko.

The delegations were accompanied by advisors and experts.

The preliminary exchange of views which took place concerning the limitations of strategic arms was useful to both sides. As a result of that exchange, each side is able better to understand the views of the other with respect to the problems under consideration. An understanding was reached on the general range of questions which will be the subject of further US-Soviet exchanges.

The two sides express their appreciation to the Government of Finland for creating favorable conditions for holding the negotiations. They are grateful for the traditional Finnish hospitality which was extended to them.

Agreement was reached that negotiations between the US and the USSR Delegations will be resumed on April 16, 1970, in Vienna, and that they will be held again in Helsinki at a later time.

Appendix IV

Statement by the President, Announcing Policy Decisions on Chemical and Biological Warfare Programs, November 25, 1969

Soon after taking office I directed a comprehensive study of our chemical and biological defense policies and programs. There had been no such review in over 15 years. As a result, objectives and policies in this field were uncleaf and programs lacked definition and direction.

Under the auspices of the National Security Council, the Departments of State and Defense, the Arms Control and Disarmament Agency, the Office of Science and Technology, the Intelligence Community, and other agencies worked closely together on this study for over 6 months. These government efforts were aided by contributions from the scientific community through the President's Scientific Advisory Committee.

This study has now been completed and its findings carefully considered by the National Security Council. I am now reporting the decisions taken on the basis of this review.

Chemical Warfare Program

As to our chemical warfare program, the United States:

—Reaffirms its oft-repeated renunciation of the first use of lethal chemical weapons.

—Extends this renunciation to the first use of incapacitating chemicals.

Consonant with these decisions, the Administration will submit to the Senate, for its advice and consent to ratification, The Geneva Protocol of 1925 which prohibits the first use in war of "asphyxiating, poisonous or other Gases and of Bacteriological Methods of Warfare." The United States has long supported the principles and objectives of this protocol. We take this step toward formal ratification to reinforce our continuing advocacy of international constraints on the use of these weapons.

Biological Research Program

Biological weapons have massive, unpredictable and potentially uncontrollable consequences. They may produce global epidemics and impair the health of future generations. I have therefore decided that:

—The U.S. shall renounce the use of lethal biological agents and weapons, and all other methods of biological warfare.

—The U.S. will confine its biological research to defensive measures such as immunization and safety measures.

—The DOD has been asked to make recommendations as to the disposal of existing stocks of bacteriological weapons.

In the spirit of these decisions, the

United States associates itself with the principles and objectives of the United Kingdom Draft Convention which would ban the use of biological methods of warfare. We will seek, however, to clarify specific provisions of the draft to assure that necessary safeguards are included.

Neither our association with the Convention nor the limiting of our program to research will leave us vulnerable to surprise by an enemy who does not observe these rational restraints. Our intelligence community will continue to watch carefully the nature and extent of the biological programs of others.

These important decisions, which have been announced today, have been taken as an initiative toward peace. Mankind already carries in its own hands too many of the seeds of its own destruction. By the examples we set today, we hope to contribute to an atmosphere of peace and understanding between nations and among men.

Appendix V

Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare. Signed at Geneva, June 17, 1925

The undersigned plenipotentiaries, in the name of their respective Governments:

Whereas the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general opinion of the civilized world;

Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers of the world are Parties; and

To the end that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations;

Declare:

> That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.

The High Contracting Parties will exert every effort to induce other States to accede to the present Protocol. Such accession will be notified to the Government of the French Republic, and by the latter to all signatory and acceding Powers, and will take effect on the date of the notification by the Government of the French Republic.

The present Protocol, of which the French and English texts are both authentic, shall be ratified as soon as possible. It shall bear today's date.

The ratifications of the present Protocol shall be addressed to the Government of the French Republic, which will at once notify the deposit of such ratification to each of the signatory and acceding Powers.

The instruments of ratification of and accession to the present Protocol will remain deposited in the archives of the Government of the French Republic.

The present Protocol will come into force for each signatory Power as from the date of deposit of its ratification, and, from that moment, each Power will be bound as regards other Powers which have already deposited their ratifications.

IN WITNESS WHEREOF the Plenipotentiaries have signed the present Protocol.

DONE at Geneva in a single copy, the seventeenth day of June, One Thousand Nine Hundred and Twenty-Five.

Appendix VI

Revised Draft Convention for the Prohibition of Biological Methods of Warfare and Accompanying Draft Security Council Resolution Proposed by the United Kingdom at the Conference of the Committee on Disarmament, August 26, 1969

THE STATES CONCLUDING THIS CONVENTION, hereinafter referred to as the "Parties to the Convention".

RECALLING that many States have become Parties to The Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June, 1925.

RECOGNISING the contribution that the said Protocol has already made, and continues to make, to mitigating the horrors of war,

RECALLING FURTHER United Nations General Assembly Resolutions 2162B (XXI) of 5 December 1966, and 2454A (XXIII) of 20 December 1968, which called for strict observance by all States of the principles and objectives of the Geneva Protocol and invited all States to accede to it,

BELIEVING that chemical and biological discoveries should be used only for the betterment of human life,

RECOGNISING nevertheless that the development of scientific knowledge throughout the world will increase the risk of eventual use of biological methods of warfare,

CONVINCED that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimise this risk,

DESIRING therefore to reinforce the Geneva Protocol by the conclusion of a Convention making special provision in this field,

DECLARING their belief that, in particular, provision should be made for the prohibition of recourse to biological methods of warfare in any circumstances,

HAVE AGREED as follows:

Article I. Each of the Parties to the Convention undertakes, insofar as it may not already be committed in that respect under Treaties or other instruments in force prohibiting the use of chemical and biological methods of warfare, never in any circumstances, by making use for hostile purposes of microbial or other biological agents causing death, damage or disease by infection or infestation to man, other animals, or crops, to engage in biological methods of warfare.

Article II. Each of the Parties to the Convention undertakes:

(a) not to produce or otherwise acquire, or assist in or permit the production or acquisition of:

(i) microbial or other biological agents of types and in quantities that have no independent justification for pro-

phylactic or other peaceful purposes;

(ii) ancillary equipment or vectors the purpose of which is to facilitate the use of such agents for hostile purposes;

(b) not to conduct, assist or permit research aimed at production of the kind prohibited in sub-paragraph (a) of this Article; and

(c) to destroy, or divert to peaceful purposes, within three months after the Convention comes into force for that Party, any stocks in its possession of such agents or ancillary equipment or vectors as have been produced or otherwise acquired for hostile purposes.

Article III

1. Any Party to the Convention which believes that biological methods of warfare have been used against it may lodge a complaint with the Secretary-General of the United Nations, submitting all evidence at its disposal in support of the complaint, and request that the complaint be investigated and that a report on the result of the investigation be submitted to the Security Council.

2. Any Party to the Convention which believes that another Party has acted in breach of its undertaking under Articles I and II of the Convention, but which is not entitled to lodge a complaint under Paragraph I of this Article, may lodge a complaint with the Security Council, submitting all evidence at its disposal, and request that the complaint be investigated.

3. Each of the Parties to the Convention undertakes to co-operate fully with the Secretary-General and his authorised representatives in any investigation he may carry out, as a result of a complaint, in accordance with Security Council Resolution No. . . . .

Article IV. Each of the Parties to the Convention affirms its intention to provide or support appropriate assistance, in accordance with the United Nations Charter, to any Party to the Convention, if the Security Council concludes that biological methods of warfare have been used against that Party.

Article V. Each of the Parties to the Convention undertakes to pursue negotiations in good faith on effective measures to strengthen the existing constraints on chemical methods of warfare.

Article VI. Nothing contained in the present Convention shall be construed as in any way limiting or derogating from obligations assumed by any State under the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases, and of Bacteriological Methods of Warfare, signed at Geneva on 17 June, 1925.

Article VII. [Provisions for amendments.]

Article VIII. [Provisions for Signature, Ratification, Entry into Force, etc.]

Article IX

1. This Convention shall be of unlimited duration.

2. Each Party shall in exercising its national sovereignty have the right to withdraw from the Convention, if it decides that extraordinary events, related to the subject matter of this Convention, have jeopardised the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Convention and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards

as having jeopardised its supreme interests.

Article X. [Provisions on languages of texts, etc.]

Revised Draft Security Council Resolution

THE SECURITY COUNCIL,

WELCOMING the desire of a large number of States to subscribe to the Convention for the Prohibition of Biological Methods of Warfare, and thereby undertake never to engage in such methods of warfare; to prohibit the production and research aimed at the production of biological weapons; and to destroy, or divert to peaceful purposes, such weapons as may already be in their possession,

NOTING that under Article III of the Convention, Parties will have the right to lodge complaints and to request that the complaints be investigated,

RECOGNISING the need, if confidence in the Convention is to be established, for appropriate arrangements to be made in advance for the investigation of any such complaints, and the particular need for urgency in the investigation of complaints of the use of biological methods of warfare,

NOTING further the declared intention of Parties to the Convention to provide or support appropriate assistance, in accordance with the Charter, to any other Party to the Convention, if the Security Council concluded that biological methods of warfare have been used against that Party,

REAFFIRMING in particular the inherent right, recognised under Article 51 of the Charter, of individual and collective self-defence if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security,

1. Requests the Secretary-General

   (a) to take such measures as will enable him

      (i) to investigate without delay any complaints lodged with him in accordance with Article III.1 of the Convention;

      (ii) if so requested by the Security Council, to investigate any complaint made in accordance with Article III.2 of the Convention; and

   (b) to report to the Security Council on the result of any such investigation.

2. Declares its readiness to give urgent consideration

   (a) to any complaint that may be lodged with it under Article III.2 of the Convention; and

   (b) to any report that the Secretary-General may submit in accordance with operative paragraph 1 of this Resolution on the result of his investigation of a complaint; and if it concludes that the complaint is well-founded, to consider urgently what action it should take or recommend in accordance with the Charter.

3. Calls upon Member States and upon Specialised Agencies of the United Nations to co-operate as appropriate with the Secretary-General for the fulfillment of the purposes of this Resolution.

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Appendix VII

Union of Soviet Socialist Republics and United States of America Draft Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof (Revised), October 30, 1969

The States Parties to this Treaty,

Recognising the common interest of mankind in the progress of the exploration and use of the seabed and the ocean floor for peaceful purposes,

Considering that the prevention of a nuclear arms race on the seabed and the ocean floor serves the interests of maintaining world peace, reduces international tensions, and strengthens friendly relations among States,

Convinced that this Treaty constitutes a step towards the exclusion of the seabed, the ocean floor and the subsoil thereof from the arms race, and determined to continue negotiations concerning further measures leading to this end,

Convinced that this Treaty constitutes a step towards a treaty on general and complete disarmament under strict and effective international control, and determined to continue negotiations to this end,

Convinced that this Treaty will further the purposes and principles of the Charter of the United Nations, in a manner consistent with the principles of international law and without infringing the freedoms of the high seas,

Have agreed as follows:

Article I

1. The States Parties to this Treaty undertake not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the maximum contiguous zone provided for in the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone any objects with nuclear weapons or any other types of weapons of mass destruction, as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.

2. The undertakings of paragraph 1 of this Article shall also apply within the contiguous zone referred to in paragraph 1 of this Article, except that within that zone they shall not apply to the coastal state.

3. The States Parties to this Treaty undertake not to assist, encourage or induce any State to commit actions prohibited by this Treaty and not to participate in any other way in such actions.

Article II

1. For the purpose of this Treaty the outer limit of the contiguous zone referred to in Article I shall be measured in accordance with the provisions of Part I, Section II of the 1958 Geneva Convention on the Ter-

Appendix VII

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The States Parties to this Treaty,

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2. The undertakings of paragraph 1 of this Article shall also apply within the contiguous zone referred to in paragraph 1 of this Article, except that within that zone they shall not apply to the coastal state.

3. The States Parties to this Treaty undertake not to assist, encourage or induce any State to commit actions prohibited by this Treaty and not to participate in any other way in such actions.

Article II

1. For the purpose of this Treaty the outer limit of the contiguous zone referred to in Article I shall be measured in accordance with the provisions of Part I, Section II of the 1958 Geneva Convention on the Ter-

ritorial Sea and the Contiguous Zone and in accordance with international law.

2. Nothing in this Treaty shall be interpreted as supporting or prejudicing the position of any State Party with respect to rights or claims which such State Party may assert, or with respect to recognition or nonrecognition of rights or claims asserted by any other State, related to waters off its coasts, or to the seabed and the ocean floor.

Article III

1. In order to promote the objectives and ensure the observance of the provisions of this Treaty, the States Parties to the Treaty shall have the right to verify the activities of other States Parties to the Treaty on the seabed and the ocean floor and in the subsoil thereof beyond the maximum contiguous zone, referred to in Article I, if these activities raise doubts concerning the fulfillment of the obligations assumed under this Treaty, without interfering with such activities or otherwise infringing rights recognized under international law, including the freedoms of the high seas.

2. The right of verification recognized by the States Parties in paragraph 1 of this Article may be exercised by any State Party using its own means or with the assistance of any other State Party.

3. The States Parties to the Treaty undertake to consult and cooperate with a view to removing doubts concerning the fulfillment of the obligations assumed under this Treaty. In the event that consultation and cooperation have not removed the doubts and there is serious question concerning the fulfillment of the obligations assumed under this Treaty, States Parties to this Treaty may, in accordance with the provisions of the Charter of the United Nations, refer the matter to the Security Council.

Article IV. Any State Party to the Treaty may propose amendments to this Treaty. Amendments shall enter into force for each State Party to the Treaty accepting the amendments upon their acceptance by a majority of the States Parties to the Treaty and thereafter for each remaining State Party on thé date of acceptance by it.

Article V. Five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the preamble and the provisions of the Treaty are being realized. Such review shall take into account any relevant technological developments. The review conference shall determine in accordance with the views of a majority of those Parties attending whether and when an additional review conference shall be convened.

Article VI. Each Party to this Treaty shall in exercising its national sovereignty have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized the supreme interests of its Country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it considers to have jeopardized its supreme interests.

Article VII

1. This Treaty shall be open for signature to all States. Any State which does not sign the Treaty before its entry into force in accordance with paragraph 3 of this Article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and of acces-

sion shall be deposited with the Governments of _____ which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after the deposit of instruments of ratification by twenty-two Governments, including the Governments designated as Depositary Governments of this Treaty.

4. For States whose instruments of ratification or accession are deposited after the entry into force of this Treaty it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall forthwith notify the Governments of all States signatory and acceding to this Treaty of the date of each signature, of the date of deposit of each instrument of ratification or of accession, of the date of the entry into force of this Treaty, and of the receipt of other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

Article VIII. This Treaty, the English, Russian, French, Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the States signatory and acceding thereto.

IN WITNESS whereof the undersigned, being duly authorized thereto, have signed this Treaty.

DONE in _____ at _____ this _____ day of _____, _____.

Appendix VIII

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Institute for Defense Analyses
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Professor of Sociology at the University of Chicago
Chicago, Ill.

Appendix IX

ACDA Depository Libraries

Alaska

University of Alaska
University Library
College, Alaska 99735

Arizona

Arizona State University
University Library
Tempe, Ariz. 85281

Arkansas

University of Arkansas
University Library
Reference Department
Fayetteville, Ark. 72701

California

Claremont Colleges
Honnold Library
Documents Department
Claremont, Calif. 91711

Los Angeles Public Library
630 West Fifth Street
Los Angeles, Calif. 90017

San Francisco Public Library
Civic Center
San Francisco, Calif. 94102

San Jose State College
College Library
Documents Department
San Jose, Calif. 95114

Stanford University
Law Library
Serials Department
Stanford, Calif. 94305

Stanford University
Hoover Institute, Librarian
Stanford, Calif. 94305

University of California
General Library
Documents Department
Berkeley, Calif. 94720

University of California
University Library
Government Documents Department
Davis, Calif. 95616

University of California
University Library
Los Angeles, Calif. 90024

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Denver Public Library
1357 Broadway
Denver, Colo. 80203

U.S. Air Force Academy
Academy Library
Colorado Springs, Colo. 80901

University of Colorado Libraries
Government Documents Division
Boulder, Colo. 80302

Connecticut

Olin College
College Library
Middletown, Conn. 06457

Yale University Library
University Library, Documents
New Haven, Conn. 06520

Delaware

University of Delaware Library
Government Documents Department
Newark, Del. 19711

District of Columbia

American University
University Library
Washington, D.C. 20016

Georgetown University
University Library
Washington, D.C. 20007

Howard University
Founders Library
Washington, D.C. 20001

Library of Congress
ACDA Bibliography Section
Washington, D.C. 20450

Florida

St. Johns River Jr. College
College Library
Palatka, Fla. 32077

Georgia

Emory University
University Library
Documents Center
Atlanta, Ga. 30322

University of Georgia
University Libraries
Documents Division
Athens, Ga. 30601

Hawaii

University of Hawaii
University Library
Government Documents Collection
Honolulu, Hawaii 96822

Idaho

Idaho State University
University Library
Documents Department
Pocatello, Idaho 83201

Illinois

Chicago Public Library
78 E. Washington Street
Chicago, Ill. 60602

University of Chicago Library
Documents Department
Chicago, Ill. 60637

Indiana

Indiana University
University Library
Documents Section
Bloomington, Ind. 47401

Indiana State University
Cunningham Memorial Library
Terre Haute, Ind. 47809

Purdue University
General Library
Memorial Center
Lafayette, Ind. 47907

Iowa

Iowa State University
University Library
Government Documents
Ames, Iowa 50010

Kansas

Kansas State University
University Library
Documents Department
Manhattan, Kans. 66502

Wichita State University
University Library, Documents
Wichita, Kans. 67208

Kentucky

Louisville Free Public Library
Fourth and York Streets
Louisville, Ky. 40203

University of Kentucky
Margaret I. King Library
Lexington, Ky. 40506

Western Kentucky University
Margie Helm Library
Bowling Green, Ky. 42101

Louisiana

New Orleans Public Library
219 Loyola Avenue
New Orleans, La. 70140

Maine

University of Maine
Raymond H. Gogler Library
Orono, Maine 04473

Maryland

Enoch Pratt Free Library
400 Cathedral Street
Baltimore, Md. 20201

Goucher College
College Library
Towson
Baltimore, Md. 21204

U.S. Naval Academy
Academy Library
Annapolis, Md. 21402

University of Maryland
McKeldin Library
College Park, Md. 20740

Massachusetts

Boston Public Library
Copley Square
Boston, Mass. 02117

Harvard University
Center for International Affairs Library
Cambridge, Mass. 02138

Massachusetts Institute of Technology
M.I.T. Libraries
Documents Section/14E–210
Cambridge, Mass. 02139

Michigan

Detroit Public Library
5201 Woodward Avenue
Detroit, Mich. 48202

Michigan State University
University Library
East Lansing, Mich. 48823

University of Michigan
General Library
Serials and Documents Section
Ann Arbor, Mich. 48104

Wayne State University
Director of Libraries
Detroit, Mich. 48202

Minnesota

Minneapolis Public Library
300 Nicollet Avenue
Minneapolis, Minn. 55401

Mississippi

Mississippi State University
University Library
State College, Miss. 39762

Missouri

St. Louis Public Library
Olive, 13th and 14th Streets
St. Louis, Mo. 63103

Southeast Missouri State College
Kent Library
Government Documents
Cape Girardeau, Mo. 63701

University of Missouri
University Library, Documents
Columbia, Mo. 65201

Montana

University of Montana Library
Documents Department
Missoula, Mont. 59801

Nebraska

University of Nebraska
University Libraries
Acquisition Department
Lincoln, Nebr. 68508

Nevada

University of Nevada
University Library
Government Publications Department
Reno, Nev. 89507

New Hampshire

Dartmouth College
Baker Library
Hanover, N.H. 03755

New Jersey

Princeton University
University Library
Documents Division
Princeton, N.J. 08540

New Mexico

University of New Mexico
Zimmerman Library
Albuquerque, N. Mex. 87106

New Mexico State University
University Library
Las Cruces, N. Mex. 88001

New York

Cornell University Libraries
Central Serial Record Department
Ithaca, N.Y. 14850

Dag Hammarskjold Library
United Nations
Acquisitions Section
New York, N.Y. 10017

New York Public Library
Fifth Avenue and 42d Street
New York, N.Y. 10017

State University of New York
University Library
Documents Section
Binghamton, N.Y. 13901

U.S. Military Academy
Academy Library
West Point, N.Y. 10996

United States Mission
U.N. Library, 799 U.N. Plaza
New York, N.Y. 10017

North Carolina

Duke University
William Perkins Library
Durham, N.C. 27706

University of North Carolina
University Library
BA/SS Division
Chapel Hill, N.C. 27514

North Dakota

University of North Dakota
University Law Library
Grand Forks, N.D. 58201

Ohio

Batelle Memorial Institute
ACTIAC
Columbus, Ohio 43201

Bowling Green University
University Library
Bowling Green, Ohio 43402

Cleveland Public Library
325 Superior Avenue, N.E.
Cleveland, Ohio 44114

Oberlin College
College Library
Oberlin, Ohio 44074

Oklahoma

Oklahoma State University
University Library
Documents Division
Stillwater, Okla. 74074

Oregon

University of Oregon
Office of Federal Government
Relations
Eugene, Oreg. 97403

Pennsylvania

Bryn Mawr College
College Library
Bryn Mawr, Pa. 19010

Free Library of Philadelphia
Logan Square
Philadelphia, Pa. 19144

University of Pennsylvania
University Library
Serials Department
Philadelphia, Pa. 19104

University of Pittsburgh
Hillman Library, G–8
Pittsburgh, Pa. 15213

Rhode Island

Brown University
University Library, Documents
Providence, R.I. 02912

South Carolina

Clemson University
University Library
Clemson, S.C. 29631

Tennessee

Joint University Libraries
Acquisitions Department
Nashville, Tenn. 37203

Texas

Baylor University
University Library
Waco, Tex. 76706

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Dallas Public Library
1954 Commerce Street
Dallas, Tex. 75201

Rice University
Fondren Library
P.O. Box 1892
Houston, Tex. 77001

University of Texas
University Library, Documents
Austin, Tex. 78712

Virginia

Defense Documentation Center,
Headquarters
Cameron Station
Alexandria, Va. 22314

University of Virginia
Alderman Library
Public Documents
Charlottesville, Va. 22901

Washington

Seattle Public Library
4th and Madison
Seattle, Wash. 98104

West Virginia

West Virginia University
University Library
Documents Collection
Morgantown, W. Va. 26506

Wisconsin

Milwaukee Public Library
814 West Wisconsin Avenue
Milwaukee, Wis. 53233

Switzerland

United Nations
Palais des Nations Library
Geneva, Switzerland

U.S. Mission
CCD, 80 *rue de Lausanne*
Geneva, Switzerland

Appendix X

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U.S. GOVERNMENT PRINTING OFFICE: 1970 O—378-816

U.S. ARMS CONTROL AND DISARMAMENT AGENCY

Publication 54

For sale by the Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402 - Price 35 cents